

GenCore version 5.1.4\_p5\_4578  
Copyright (c) 1993 - 2003 CompuGen Ltd.

CM nucleic nucleic search, using sw model

Run on: March 18, 2003, 10:54:41 : Search time 849.994 Seconds  
(without alignment's)  
400.142 Million cell updates/sec

Title: us-09-900-115-2

Perfect score: 21

Sequence: 1 qacccatqacaccccccqccq 21

Scoring table: IDENTITY\_NOR  
gapop 10.0, capext 1.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 102860

Minimum DB seq length: 0

Maximum DB seq length: 50

Post-processing: Minimum Match: 0%

Maximum Match: 100%

Lasting first 1000 summaries

Database:

EST:  
1: em\_estbta:\*  
2: em\_estbta:\*  
3: em\_estbta:\*  
4: em\_estbta:\*  
5: em\_estbta:\*  
6: em\_estbta:\*  
7: em\_estbta:\*  
8: em\_estbta:\*  
9: qb\_est1:\*  
10: qb\_est2:\*  
11: qb\_est3:\*  
12: qb\_est3:\*  
13: qb\_est4:\*  
14: qb\_est4:\*  
15: em\_estbta:\*  
16: em\_estbta:\*  
17: qb\_est1:\*  
18: em\_qss\_hum:\*  
19: em\_qss\_inv:\*  
20: em\_qss\_ptn:\*  
21: em\_qss\_vrt:\*  
22: em\_qss\_tun:\*  
23: em\_qss\_mam:\*  
24: em\_qss\_mus:\*  
25: em\_qss\_other:\*  
26: em\_qss\_pro:\*  
27: em\_qss\_red:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| Result No. | Score | Match | Length | ID       | Description        |
|------------|-------|-------|--------|----------|--------------------|
| 1          | 14.6  | 64.8  | 50     | A0102729 | A0102729 A0102729  |
| 2          | 14.4  | 63.8  | 50     | A0104812 | A0104812 A0104812  |
| 3          | 14.2  | 62.9  | 50     | A0103580 | A0103580 A0103580  |
| 4          | 12.8  | 61.0  | 24     | A2761059 | A2761059 IM0555108 |
| 5          | 12.6  | 60.0  | 50     | A0104453 | A0104453 A0104453  |
| 6          | 12.6  | 60.0  | 50     | A0104454 | A0104454 A0104454  |

|          |             |    |    |           |      |      |    |      |      |
|----------|-------------|----|----|-----------|------|------|----|------|------|
| A0104457 | A0104457    | 50 | 9  | A0104457  | 60.0 | 12.6 | 7  | 12.6 | 60.0 |
| A0104460 | A0104460    | 50 | 9  | A0104460  | 60.0 | 12.6 | 8  | 12.6 | 60.0 |
| A0104462 | A0104462    | 50 | 9  | A0104462  | 60.0 | 12.6 | 9  | 12.6 | 60.0 |
| N94609   | zb79404.s1  | 35 | 14 | N94609    | 59.0 | 12.4 | 10 | 12.4 | 59.0 |
| 117523   | ust_m54.The | 29 | 14 | 117523    | 58.1 | 12.2 | 11 | 12.2 | 58.1 |
| AA687114 | nv59d10.s   | 43 | 9  | AA687114  | 58.1 | 12.2 | 12 | 12.2 | 58.1 |
| A1520679 | 1106c03.x   | 43 | 9  | A1520679  | 58.1 | 12.2 | 13 | 12.2 | 58.1 |
| A2346403 | 1M0066004   | 19 | 17 | A2346403  | 57.1 | 12   | 14 | 12   | 57.1 |
| A1567849 | tg87e07.x   | 28 | 9  | A1567849  | 57.1 | 12   | 15 | 12   | 57.1 |
| h6701002 | 602682184   | 43 | 12 | h6701002  | 57.1 | 12   | 16 | 12   | 57.1 |
| A2452075 | 1M0251016   | 44 | 17 | A2452075  | 57.1 | 12   | 17 | 12   | 57.1 |
| A2775193 | 2M0007716   | 22 | 17 | A2775193  | 56.2 | 11.8 | 18 | 11.8 | 56.2 |
| A1044427 | Homo_Sapi   | 35 | 2  | HS0009777 | 56.2 | 11.8 | 19 | 11.8 | 56.2 |
| A1689454 | tx94c06.x   | 37 | 9  | A1689454  | 56.2 | 11.8 | 20 | 11.8 | 56.2 |
| A2460654 | 1M0266101   | 41 | 17 | A2460654  | 56.2 | 11.8 | 21 | 11.8 | 56.2 |
| A2464793 | 1M0141802   | 42 | 17 | A2464793  | 56.2 | 11.8 | 22 | 11.8 | 56.2 |
| A2464752 | 0868001.s   | 43 | 9  | A2464752  | 56.2 | 11.8 | 23 | 11.8 | 56.2 |
| A0104706 | A0104706    | 50 | 9  | A0104706  | 56.2 | 11.8 | 24 | 11.8 | 56.2 |
| A0104708 | A0104708    | 50 | 9  | A0104708  | 56.2 | 11.8 | 25 | 11.8 | 56.2 |
| A0104710 | A0104710    | 50 | 9  | A0104710  | 56.2 | 11.8 | 26 | 11.8 | 56.2 |
| H0852390 | SALK_0245   | 40 | 17 | H0852390  | 55.2 | 11.6 | 27 | 11.6 | 55.2 |
| AA766175 | oa24003.s   | 37 | 9  | AA766175  | 55.2 | 11.6 | 28 | 11.6 | 55.2 |
| A1499210 | 1008002.x   | 37 | 9  | A1499210  | 55.2 | 11.6 | 29 | 11.6 | 55.2 |
| H1459192 | 603200307   | 38 | 13 | H1459192  | 55.2 | 11.6 | 30 | 11.6 | 55.2 |
| BE871689 | 601449550   | 39 | 12 | BE871689  | 55.2 | 11.6 | 31 | 11.6 | 55.2 |
| H1562641 | 60326577    | 42 | 13 | H1562641  | 55.2 | 11.6 | 32 | 11.6 | 55.2 |
| A2464793 | 1M0284904   | 44 | 17 | A2464793  | 55.2 | 11.6 | 33 | 11.6 | 55.2 |
| A2568888 | 1M0555121   | 49 | 17 | A2568888  | 55.2 | 11.6 | 34 | 11.6 | 55.2 |
| A0104023 | A0104023    | 50 | 9  | A0104023  | 55.2 | 11.6 | 35 | 11.6 | 55.2 |
| A0104024 | A0104024    | 50 | 9  | A0104024  | 55.2 | 11.6 | 36 | 11.6 | 55.2 |
| A0106912 | A0106912    | 50 | 9  | A0106912  | 55.2 | 11.6 | 37 | 11.6 | 55.2 |
| A0106928 | A0106928    | 50 | 9  | A0106928  | 55.2 | 11.6 | 38 | 11.6 | 55.2 |
| A0106960 | A0106960    | 50 | 9  | A0106960  | 55.2 | 11.6 | 39 | 11.6 | 55.2 |
| H0616279 | B0616279    | 50 | 10 | H0616279  | 55.2 | 11.6 | 40 | 11.6 | 55.2 |
| AA249419 | 2819547.5   | 26 | 10 | AA249419  | 54.3 | 11.4 | 41 | 11.4 | 54.3 |
| A1684252 | 1802612.x   | 37 | 9  | A1684252  | 54.3 | 11.4 | 42 | 11.4 | 54.3 |
| A243423  | 1M0976107   | 37 | 17 | A243423   | 54.3 | 11.4 | 43 | 11.4 | 54.3 |
| H1660394 | 603402045   | 39 | 13 | H1660394  | 54.3 | 11.4 | 44 | 11.4 | 54.3 |
| A1288030 | q099604.x   | 40 | 9  | A1288030  | 54.3 | 11.4 | 45 | 11.4 | 54.3 |
| H0824661 | 602727118   | 40 | 12 | H0824661  | 54.3 | 11.4 | 46 | 11.4 | 54.3 |
| A1153694 | v291d08.1   | 46 | 9  | A1153694  | 54.3 | 11.4 | 47 | 11.4 | 54.3 |
| A1863959 | wj54d06.x   | 46 | 9  | A1863959  | 54.3 | 11.4 | 48 | 11.4 | 54.3 |
| H1908094 | 604067118   | 46 | 13 | H1908094  | 54.3 | 11.4 | 49 | 11.4 | 54.3 |
| AA934986 | 0095108.s   | 49 | 9  | AA934986  | 54.3 | 11.4 | 50 | 11.4 | 54.3 |
| AA973215 | 0094009.s   | 49 | 9  | AA973215  | 54.3 | 11.4 | 51 | 11.4 | 54.3 |
| A0104209 | A0104209    | 50 | 9  | A0104209  | 54.3 | 11.4 | 52 | 11.4 | 54.3 |
| A0104792 | A0104792    | 50 | 9  | A0104792  | 54.3 | 11.4 | 53 | 11.4 | 54.3 |
| A2412247 | 1M0185108   | 28 | 17 | A2412247  | 54.3 | 11.2 | 54 | 11.2 | 54.3 |
| H0904656 | 601498767   | 30 | 12 | H0904656  | 54.3 | 11.2 | 55 | 11.2 | 54.3 |
| A1475999 | T.Brueci    | 30 | 17 | TA199E03P | 54.3 | 11.2 | 56 | 11.2 | 54.3 |
| A2802778 | 2M0061114   | 32 | 17 | A2802778  | 54.3 | 11.2 | 57 | 11.2 | 54.3 |
| H1914099 | 604182047   | 33 | 13 | H1914099  | 54.3 | 11.2 | 58 | 11.2 | 54.3 |
| A2666463 | 1M0544008   | 39 | 17 | A2666463  | 54.3 | 11.2 | 59 | 11.2 | 54.3 |
| A2437931 | 1M0226311   | 41 | 17 | A2437931  | 54.3 | 11.2 | 60 | 11.2 | 54.3 |
| A2776079 | 2M0004N24   | 41 | 17 | A2776079  | 54.3 | 11.2 | 61 | 11.2 | 54.3 |
| A125445  | ts37d04.x   | 43 | 9  | A125445   | 54.3 | 11.2 | 62 | 11.2 | 54.3 |
| AA638592 | v199d10.1   | 49 | 9  | AA638592  | 54.3 | 11.2 | 63 | 11.2 | 54.3 |
| H0621815 | 1067119H1   | 49 | 17 | H0621815  | 54.3 | 11.2 | 64 | 11.2 | 54.3 |
| A0104464 | A0104464    | 50 | 9  | A0104464  | 54.3 | 11.2 | 65 | 11.2 | 54.3 |
| A0106264 | A0106264    | 50 | 9  | A0106264  | 54.3 | 11.2 | 66 | 11.2 | 54.3 |
| A0106265 | A0106265    | 50 | 9  | A0106265  | 54.3 | 11.2 | 67 | 11.2 | 54.3 |
| A0106270 | A0106270    | 50 | 9  | A0106270  | 54.3 | 11.2 | 68 | 11.2 | 54.3 |
| A0108014 | A0108014    | 50 | 9  | A0108014  | 54.3 | 11.2 | 69 | 11.2 | 54.3 |
| AA903336 | 0845g12.s   | 28 | 9  | AA903336  | 52.4 | 11   | 70 | 11   | 52.4 |
| R01622   | y079e10.s1  | 34 | 14 | R01622    | 52.4 | 11   | 71 | 11   | 52.4 |
| H08731   | H08731      | 37 | 14 | H08731    | 52.4 | 11   | 72 | 11   | 52.4 |
| A1674277 | AL674277    | 40 | 9  | A1674277  | 52.4 | 11   | 73 | 11   | 52.4 |
| AL759372 | Arabiidops  | 40 | 17 | AL759372  | 52.4 | 11   | 74 | 11   | 52.4 |
| AL760347 | Arabiidops  | 40 | 17 | AL760347  | 52.4 | 11   | 75 | 11   | 52.4 |
| AL760580 | Arabiidops  | 45 | 17 | AL760580  | 52.4 | 11   | 76 | 11   | 52.4 |
| AL669377 | ty31d02.x   | 46 | 9  | AL669377  | 52.4 | 11   | 77 | 11   | 52.4 |
| A1680470 | tw81110.x   | 46 | 9  | A1680470  | 52.4 | 11   | 78 | 11   | 52.4 |
| AL760555 | Arabiidops  | 47 | 17 | AL760555  | 52.4 | 11   | 79 | 11   | 52.4 |

|       |      |      |    |    |           |                    |       |      |      |    |    |           |                     |
|-------|------|------|----|----|-----------|--------------------|-------|------|------|----|----|-----------|---------------------|
| 80    | 11   | 52.4 | 48 | 10 | HE522110  | HE522110 601440976 | c 154 | 10.4 | 49.5 | 41 | 12 | HE729017  | HE729017 601562287  |
| 81    | 11   | 52.4 | 50 | 9  | A0105196  | A0105196 A0105196  | c 154 | 10.4 | 49.5 | 41 | 17 | AZ809714  | AZ809714 290072416  |
| c 82  | 11   | 52.4 | 4  | 9  | A0105443  | A0105443 A0105443  | c 155 | 10.4 | 49.5 | 52 | 13 | BM594981  | BM594981 500172234  |
| 83    | 11   | 52.4 | 50 | 9  | A0107079  | A0107079 A0107079  | c 156 | 10.4 | 49.5 | 52 | 17 | AZ508196  | AZ508196 180550803  |
| 84    | 10.8 | 51.4 | 25 | 17 | AZ621174  | AZ621174 180454817 | c 157 | 10.4 | 49.5 | 52 | 17 | AZ855979  | AZ855979 290157821  |
| 85    | 10.8 | 51.4 | 25 | 17 | AZ494893  | AZ494893 180330822 | c 158 | 10.4 | 49.5 | 53 | 17 | AZ429658  | AZ429658 180214818  |
| c 86  | 10.8 | 51.4 | 42 | 14 | H04414    | H04414 Y12131211   | c 159 | 10.4 | 49.5 | 53 | 17 | TA193002P | TA193002P 11140081  |
| 87    | 10.8 | 51.4 | 34 | 9  | A1308216  | A1308216 495960638 | c 160 | 10.4 | 49.5 | 54 | 9  | A1045422  | A1045422 0436081    |
| 88    | 10.8 | 51.4 | 44 | 14 | W09986    | W09986 m05130211   | c 161 | 10.4 | 49.5 | 57 | 13 | RI761983  | RI761983 600489530  |
| c 89  | 10.8 | 51.4 | 46 | 17 | AZ796083  | AZ796083 290051303 | c 162 | 10.4 | 49.5 | 57 | 9  | A1118400  | A1118400 000991038  |
| c 90  | 10.8 | 51.4 | 40 | 17 | AZ827492  | AZ827492 290103021 | c 163 | 10.4 | 49.5 | 57 | 12 | HE528080  | HE528080 602042827  |
| c 91  | 10.8 | 51.4 | 44 | 10 | VR1759    | VR1759 Y185009181  | c 164 | 10.4 | 49.5 | 57 | 17 | HE024763  | HE024763 163021683  |
| c 92  | 10.8 | 51.4 | 44 | 10 | VR822733  | VR822733 AV832733  | c 165 | 10.4 | 49.5 | 57 | 17 | AZ486752  | AZ486752 180145523  |
| 93    | 10.8 | 51.4 | 44 | 17 | AZ807864  | AZ807864 290071004 | c 166 | 10.4 | 49.5 | 59 | 17 | AZ494511  | AZ494511 180429113  |
| c 94  | 10.8 | 51.4 | 44 | 17 | BH811570  | BH811570 SALK 0591 | c 167 | 10.4 | 49.5 | 40 | 9  | A1491937  | A1491937 100600338  |
| 95    | 10.8 | 51.4 | 45 | 10 | AV857682  | AV857682 AV857682  | c 168 | 10.4 | 49.5 | 42 | 17 | AZ407625  | AZ407625 180009113  |
| c 96  | 10.8 | 51.4 | 45 | 17 | AZ588295  | AZ588295 180596033 | c 169 | 10.4 | 49.5 | 43 | 9  | AA087114  | AA087114 035961078  |
| 97    | 10.8 | 51.4 | 46 | 9  | A1653573  | A1653573 139640938 | c 170 | 10.4 | 49.5 | 43 | 9  | AA960099  | AA960099 035961078  |
| 98    | 10.8 | 51.4 | 46 | 10 | BE536269  | BE536269 601062658 | c 171 | 10.4 | 49.5 | 44 | 10 | BE294167  | BE294167 601172934  |
| c 99  | 10.8 | 51.4 | 46 | 13 | B1829941  | B1829941 601080075 | c 172 | 10.4 | 49.5 | 44 | 13 | RI767378  | RI767378 604057520  |
| c 100 | 10.8 | 51.4 | 46 | 17 | AZ663583  | AZ663583 180543313 | c 173 | 10.4 | 49.5 | 46 | 9  | AA811195  | AA811195 047261238  |
| c 101 | 10.8 | 51.4 | 47 | 9  | AA959990  | AA959990 v05300138 | c 174 | 10.4 | 49.5 | 47 | 9  | AA424460  | AA424460 082910638  |
| 102   | 10.8 | 51.4 | 47 | 12 | BF016368  | BF016368 601460534 | c 175 | 10.4 | 49.5 | 47 | 17 | AZ950794  | AZ950794 290213406  |
| 103   | 10.8 | 51.4 | 50 | 9  | A0104027  | A0104027 A0104027  | c 176 | 10.4 | 49.5 | 49 | 14 | B48798    | B48798 Y169707381   |
| c 104 | 10.8 | 51.4 | 50 | 9  | A0104174  | A0104174 A0104174  | c 177 | 10.4 | 49.5 | 49 | 17 | BE796330  | BE796330 100800941  |
| c 105 | 10.8 | 51.4 | 50 | 9  | A0104813  | A0104813 A0104813  | c 178 | 10.4 | 49.5 | 50 | 9  | A0102728  | A0102728 A0102728   |
| 106   | 10.8 | 51.4 | 50 | 9  | A0105216  | A0105216 A0105216  | c 179 | 10.4 | 49.5 | 50 | 9  | A0102740  | A0102740 A0102740   |
| 107   | 10.8 | 51.4 | 50 | 9  | A0105219  | A0105219 A0105219  | c 180 | 10.4 | 49.5 | 50 | 9  | A0102746  | A0102746 A0102746   |
| 108   | 10.8 | 51.4 | 50 | 9  | A0105220  | A0105220 A0105220  | c 181 | 10.4 | 49.5 | 50 | 9  | A0103393  | A0103393 A0103393   |
| 109   | 10.8 | 51.4 | 50 | 9  | A0105223  | A0105223 A0105223  | c 182 | 10.4 | 49.5 | 50 | 9  | A0105001  | A0105001 A0105001   |
| 110   | 10.8 | 51.4 | 50 | 9  | A0105224  | A0105224 A0105224  | c 183 | 10.4 | 49.5 | 50 | 9  | A0105144  | A0105144 A0105144   |
| 111   | 10.8 | 51.4 | 50 | 9  | A0105232  | A0105232 A0105232  | c 184 | 10.4 | 49.5 | 50 | 9  | A0105165  | A0105165 A0105165   |
| c 112 | 10.8 | 51.4 | 50 | 17 | A1767345  | A1767345 A1767345  | c 185 | 10.4 | 49.5 | 50 | 9  | A0105199  | A0105199 A0105199   |
| c 113 | 10.6 | 50.5 | 22 | 17 | A2430117  | A2430117 180214824 | c 186 | 10.4 | 49.5 | 50 | 9  | A0105201  | A0105201 A0105201   |
| c 114 | 10.6 | 50.5 | 25 | 9  | AA912857  | AA912857 018200338 | c 187 | 10.4 | 49.5 | 50 | 9  | A0105204  | A0105204 A0105204   |
| c 115 | 10.6 | 50.5 | 26 | 14 | R32032    | R32032 Y163105381  | c 188 | 10.4 | 49.5 | 50 | 9  | A0105205  | A0105205 A0105205   |
| 116   | 10.6 | 50.5 | 28 | 17 | AZ774408  | AZ774408 290003909 | c 189 | 10.4 | 49.5 | 50 | 9  | A0105206  | A0105206 A0105206   |
| c 117 | 10.6 | 50.5 | 31 | 9  | A1628162  | A1628162 Y22603338 | c 190 | 10.4 | 49.5 | 50 | 9  | A0105207  | A0105207 A0105207   |
| c 118 | 10.6 | 50.5 | 34 | 9  | AA995678  | AA995678 082560338 | c 191 | 10.4 | 49.5 | 50 | 9  | A0105293  | A0105293 A0105293   |
| 119   | 10.6 | 50.5 | 35 | 10 | BE534688  | BE534688 601232660 | c 192 | 10.4 | 49.5 | 50 | 9  | A0105294  | A0105294 A0105294   |
| c 120 | 10.6 | 50.5 | 35 | 17 | AZ616470  | AZ616470 180446011 | c 193 | 10.4 | 49.5 | 50 | 9  | A0105315  | A0105315 A0105315   |
| 121   | 10.6 | 50.5 | 36 | 17 | AZ648322  | AZ648322 180517314 | c 194 | 10.4 | 49.5 | 50 | 9  | A0106273  | A0106273 A0106273   |
| 122   | 10.6 | 50.5 | 38 | 17 | AZ642713  | AZ642713 180505092 | c 195 | 10.4 | 49.5 | 50 | 9  | A0106274  | A0106274 A0106274   |
| c 123 | 10.6 | 50.5 | 40 | 9  | A1047706  | A1047706 018260531 | c 196 | 10.4 | 49.5 | 50 | 9  | A0106280  | A0106280 A0106280   |
| 124   | 10.6 | 50.5 | 40 | 17 | AZ653181  | AZ653181 180526814 | c 197 | 10.4 | 49.5 | 50 | 9  | A0106281  | A0106281 A0106281   |
| 125   | 10.6 | 50.5 | 42 | 17 | AA810878  | AA810878 290076A17 | c 198 | 10.4 | 49.5 | 50 | 9  | A0106282  | A0106282 A0106282   |
| c 126 | 10.6 | 50.5 | 43 | 14 | R34540    | R34540 Y05809831   | c 199 | 10.4 | 49.5 | 50 | 9  | A0106283  | A0106283 A0106283   |
| c 127 | 10.6 | 50.5 | 44 | 14 | BE5305    | BE5305 018220244   | c 200 | 10.4 | 49.5 | 50 | 9  | A0106284  | A0106284 A0106284   |
| 128   | 10.6 | 50.5 | 44 | 17 | TA165305Q | TA165305Q 11140081 | c 201 | 10.4 | 49.5 | 50 | 9  | A0106324  | A0106324 A0106324   |
| 129   | 10.6 | 50.5 | 45 | 17 | AZ504949  | AZ504949 180433124 | c 202 | 10.4 | 49.5 | 50 | 9  | A0106325  | A0106325 A0106325   |
| c 130 | 10.6 | 50.5 | 45 | 17 | AZ653181  | AZ653181 180526814 | c 203 | 10.4 | 49.5 | 50 | 9  | A0106326  | A0106326 A0106326   |
| c 131 | 10.6 | 50.5 | 47 | 13 | B1159168  | B1159168 602922660 | c 204 | 10.4 | 49.5 | 50 | 9  | A0106644  | A0106644 A0106644   |
| c 132 | 10.6 | 50.5 | 47 | 17 | AZ795746  | AZ795746 290051107 | c 205 | 10.4 | 49.5 | 50 | 9  | A0106645  | A0106645 A0106645   |
| 133   | 10.6 | 50.5 | 48 | 17 | AZ485794  | AZ485794 180413824 | c 206 | 10.4 | 49.5 | 50 | 9  | A0106646  | A0106646 A0106646   |
| c 134 | 10.6 | 50.5 | 49 | 9  | AA644435  | AA644435 058641043 | c 207 | 10.4 | 49.5 | 50 | 9  | A0106672  | A0106672 A0106672   |
| c 135 | 10.6 | 50.5 | 49 | 9  | A1442488  | A1442488 SA2710837 | c 208 | 10.4 | 49.5 | 50 | 9  | A0107009  | A0107009 A0107009   |
| c 136 | 10.6 | 50.5 | 49 | 9  | A1685633  | A1685633 118960938 | c 209 | 10.4 | 49.5 | 50 | 9  | A0107398  | A0107398 A0107398   |
| 137   | 10.6 | 50.5 | 49 | 9  | A1941380  | A1941380 S0120111Y | c 210 | 10.4 | 49.5 | 50 | 9  | A0107547  | A0107547 A0107547   |
| c 138 | 10.6 | 50.5 | 49 | 17 | AZ817223  | AZ817223 290086819 | c 211 | 10.4 | 49.5 | 50 | 10 | AA424880  | AA424880 058700137  |
| c 139 | 10.6 | 50.5 | 50 | 9  | A0102703  | A0102703 A0102703  | c 212 | 10.4 | 49.5 | 50 | 17 | AZ6602141 | AZ6602141 180420813 |
| c 140 | 10.6 | 50.5 | 50 | 9  | A0102997  | A0102997 A0102997  | c 213 | 10.4 | 49.5 | 50 | 17 | AZ948909  | AZ948909 290212F11  |
| c 141 | 10.6 | 50.5 | 50 | 9  | A0103944  | A0103944 A0103944  | c 214 | 10.2 | 48.6 | 23 | 17 | TA202011Q | TA202011Q 11140081  |
| 142   | 10.6 | 50.5 | 50 | 9  | A0103949  | A0103949 A0103949  | c 215 | 10.2 | 48.6 | 25 | 9  | A1432530  | A1432530 13960938   |
| 143   | 10.6 | 50.5 | 50 | 9  | A0103955  | A0103955 A0103955  | c 216 | 10.2 | 48.6 | 31 | 9  | A1331811  | A1331811 180100638  |
| c 144 | 10.6 | 50.5 | 50 | 9  | A0104381  | A0104381 A0104381  | c 217 | 10.2 | 48.6 | 31 | 9  | A1601175  | A1601175 018910538  |
| c 145 | 10.6 | 50.5 | 50 | 9  | A0104703  | A0104703 A0104703  | c 218 | 10.2 | 48.6 | 34 | 9  | AA953692  | AA953692 08860138   |
| 146   | 10.6 | 50.5 | 50 | 9  | A0105434  | A0105434 A0105434  | c 219 | 10.2 | 48.6 | 34 | 9  | A1202980  | A1202980 13260838   |
| c 147 | 10.6 | 50.5 | 50 | 9  | A0105445  | A0105445 A0105445  | c 220 | 10.2 | 48.6 | 34 | 9  | A1609080  | A1609080 127290938  |
| c 148 | 10.6 | 50.5 | 50 | 9  | A0105761  | A0105761 A0105761  | c 221 | 10.2 | 48.6 | 34 | 14 | c 20891   | c 20891 1805800496  |
| c 149 | 10.6 | 50.5 | 50 | 9  | AA253884  | AA253884 m04030337 | c 222 | 10.2 | 48.6 | 37 | 9  | AA92758   | AA92758 018410338   |
| 150   | 10.6 | 50.5 | 50 | 12 | BE978663  | BE978663 088130637 | c 223 | 10.2 | 48.6 | 37 | 9  | A1445619  | A1445619 110800438  |
| c 151 | 10.4 | 49.5 | 25 | 9  | A1758887  | A1758887 194051138 | c 224 | 10.2 | 48.6 | 37 | 9  | A1604882  | A1604882 127300338  |
| c 152 | 10.4 | 49.5 | 31 | 9  | AA878823  | AA878823 018700438 | c 225 | 10.2 | 48.6 | 37 | 9  | A1769404  | A1769404 011600738  |

```

226 10.2 48.6 37 17 A2597440 1M04111123
c 227 10.2 48.6 37 17 A2808191 2M00710118
c 228 10.2 48.6 40 9 A1784759 1045308.x
c 229 10.2 48.6 40 9 AA486696 v655404.r
c 230 10.2 48.6 40 14 H79514 y049q02.sl
c 231 10.2 48.6 40 17 A243447 1M0220016
c 232 10.2 48.6 41 13 B1549061 603197039
c 233 10.2 48.6 43 9 AA918522 0177909.s
c 234 10.2 48.6 43 9 A1364448 A1364448 qw38d11.x
c 235 10.2 48.6 43 9 A1608816 A1608816 1w21q04.x
c 236 10.2 48.6 43 9 AA546946 v668308.s
c 237 10.2 48.6 43 17 AQ025179 EP(3)1110
c 238 10.2 48.6 44 13 B1767274 603057978
c 239 10.2 48.6 44 17 A2478495 1M0298A07
c 240 10.2 48.6 45 2 HSM010412
c 241 10.2 48.6 45 14 H75777 y008h02.sl
c 242 10.2 48.6 45 17 A2332027 1M060108
c 243 10.2 48.6 45 17 A2766626 1M0564017
c 244 10.2 48.6 46 9 AA837417 0420B10.s
c 245 10.2 48.6 46 9 AA958824 v664h10.s
c 246 10.2 48.6 46 9 A1667536 1c41e06.x
c 247 10.2 48.6 46 9 A1683227 1x02b05.x
c 248 10.2 48.6 46 9 A1767057 w191305.x
c 249 10.2 48.6 46 10 AV833436 AV833436
c 250 10.2 48.6 47 14 T49377 ya74h03.sl
c 251 10.2 48.6 47 17 BH256431 KG02245-3
c 252 10.2 48.6 47 17 BH740841 KG04972-3
c 253 10.2 48.6 47 17 A2381877 1M0138E08
c 254 10.2 48.6 49 9 A1537385 1p02e11.x
c 255 10.2 48.6 49 9 A1623465 ts19a05.x
c 256 10.2 48.6 49 14 R18118 ye90e12.f1
c 257 10.2 48.6 49 14 T74548 ye58d12.f1
c 258 10.2 48.6 50 9 A1792529 AL792529
c 259 10.2 48.6 50 9 A1033829 A1033829
c 260 10.2 48.6 50 9 A1033831 A1033831
c 261 10.2 48.6 50 9 A1033832 A1033832
c 262 10.2 48.6 50 9 A1033929 A1033929
c 263 10.2 48.6 50 9 A1040422 A1040422
c 264 10.2 48.6 50 9 A1040444 A1040444
c 265 10.2 48.6 50 9 A1040458 A1040458
c 266 10.2 48.6 50 9 A105099 A105099
c 267 10.2 48.6 50 9 A105239 A105239
c 268 10.2 48.6 50 9 A105240 A105240
c 269 10.2 48.6 50 9 A105241 A105241
c 270 10.2 48.6 50 9 A105242 A105242
c 271 10.2 48.6 50 9 A105732 A105732
c 272 10.2 48.6 50 9 A106262 A106262
c 273 10.2 48.6 50 9 A106596 A106596
c 274 10.2 48.6 50 9 A107444 A107444
c 275 10.2 48.6 50 9 A107869 A107869
c 276 10.2 48.6 50 9 A107871 A107871
c 277 10.2 48.6 50 9 A107873 A107873
c 278 10.2 48.6 50 9 A107901 A107901
c 279 10.2 48.6 50 9 A107902 A107902
c 280 10.2 48.6 50 9 A107987 A107987
c 281 10.2 48.6 50 10 AW248122 2819697.5
c 282 10.2 48.6 21 17 A2443639 1M0238020
c 283 10.2 48.6 25 9 A1565893 t193a08.x
c 284 10.2 48.6 28 9 AA934268 SW0vL3CAN
c 285 10.2 48.6 28 9 A1500556 ts48e08.x
c 286 10.2 48.6 28 9 A1735009 as48e04.x
c 287 10.2 48.6 28 13 BM498053 5009-0-4
c 288 10.2 48.6 28 17 A2303959 1M0003P16
c 289 10.2 48.6 30 10 B5539470 601060144
c 290 10.2 48.6 31 9 A1055919 ox44a12.s
c 291 10.2 48.6 31 9 A1422071 t157e04.x
c 292 10.2 48.6 31 9 A1721551 1c29b04.x
c 293 10.2 48.6 31 9 AA209595 mw75d07.f1
c 294 10.2 48.6 31 17 A2628881 1M0481A19
c 295 10.2 48.6 33 17 A2401463 1M0168109
c 296 10.2 48.6 34 17 A2971851 2M0245006
c 297 10.2 48.6 35 12 B5784164 601471377
c 298 10.2 48.6 36 9 A1639154 AL639154

```

```

c 299 10.2 47.6 36 9 A1646748
c 300 10.2 47.6 36 13 B1695278 B1695278
c 301 10.2 47.6 36 17 AZ784259 AZ784259
c 302 10.2 47.6 37 9 A1644572 1740a01.x
c 303 10.2 47.6 37 17 AZ446218 1M0001012
c 304 10.2 47.6 38 17 AZ309417 1M0014012
c 305 10.2 47.6 39 9 A1775941 A1775941
c 306 10.2 47.6 39 13 B5968414 602845410
c 307 10.2 47.6 39 14 042385 042385 142385.kie
c 308 10.2 47.6 40 9 AA878853 0188409.s
c 309 10.2 47.6 40 9 AA888208 0186e10.s
c 310 10.2 47.6 40 9 AA894396 0189a05.s
c 311 10.2 47.6 40 9 A1188838 0321112.x
c 312 10.2 47.6 40 17 AZ840530 AZ840530 2M0148E08
c 313 10.2 47.6 41 13 B1827814 604074011
c 314 10.2 47.6 41 13 B1827814 604074011
c 315 10.2 47.6 43 9 A1282013 q088e02.x
c 316 10.2 47.6 43 9 A1359345 A1359345 qy23h11.x
c 317 10.2 47.6 44 10 AV833320 AV833320
c 318 10.2 47.6 44 17 BH624245 100710E0
c 319 10.2 47.6 45 13 B3067044 B3067044
c 320 10.2 47.6 45 13 BM397811 BM397811 5009-0-47
c 321 10.2 47.6 45 17 A2434030 A2434030 1M0220B14
c 322 10.2 47.6 45 17 BH631591 BH631591 1007085F0
c 323 10.2 47.6 46 9 A1091155 A1091155 0018a09.x
c 324 10.2 47.6 46 9 A1182737 A1182737 0b80a05.r
c 325 10.2 47.6 46 9 A1641110 ts64a01.x
c 326 10.2 47.6 46 9 A1884025 1c72e11.x
c 327 10.2 47.6 46 10 AW249739 2819751.f4
c 328 10.2 47.6 46 10 B5513935 B5513935 601451555
c 329 10.2 47.6 46 12 BF123084 BF123084 601761846
c 330 10.2 47.6 46 14 W64843 B696411.f1
c 331 10.2 47.6 47 12 BF969163 602269854
c 332 10.2 47.6 47 12 BF43935 602015624
c 333 10.2 47.6 48 17 A2826757 2M0102H17
c 334 10.2 47.6 48 17 BH798719 BH798719 1008112G0
c 335 10.2 47.6 49 9 AA657267 v123d07.f1
c 336 10.2 47.6 49 9 AA727650 AA727650 7097e07.f1
c 337 10.2 47.6 49 9 AA877951 0b95h02.s
c 338 10.2 47.6 49 9 A1288398 qv85d11.x
c 339 10.2 47.6 49 9 AA113042 AA113042 2065412.f1
c 340 10.2 47.6 49 9 AA231225 AA231225 mw37e04.f1
c 341 10.2 47.6 49 9 AA427743 2w22h001.s
c 342 10.2 47.6 49 9 AA429584 2w27h005.f1
c 343 10.2 47.6 49 9 AA513131 1b78409.s
c 344 10.2 47.6 49 12 B5970690 602273861
c 345 10.2 47.6 49 13 BM126198 11c7d11.x
c 346 10.2 47.6 49 17 A2481961 1M0406H07
c 347 10.2 47.6 49 17 BH748794 BH748794 SALK 04e37
c 348 10.2 47.6 49 17 BH862617 BH862617 SALK 09e02
c 349 10.2 47.6 50 9 A1024340 A1024340
c 350 10.2 47.6 50 9 A102442 A102442
c 351 10.2 47.6 50 9 A102444 A102444
c 352 10.2 47.6 50 9 A102445 A102445
c 353 10.2 47.6 50 9 A102448 A102448
c 354 10.2 47.6 50 9 A102476 A102476
c 355 10.2 47.6 50 9 A102487 A102487
c 356 10.2 47.6 50 9 A103896 A103896
c 357 10.2 47.6 50 9 A104098 A104098
c 358 10.2 47.6 50 9 A104177 A104177
c 359 10.2 47.6 50 9 A104182 A104182
c 360 10.2 47.6 50 9 A104190 A104190
c 361 10.2 47.6 50 9 A104786 A104786
c 362 10.2 47.6 50 9 A104787 A104787
c 363 10.2 47.6 50 9 A104788 A104788
c 364 10.2 47.6 50 9 A104789 A104789
c 365 10.2 47.6 50 9 A104790 A104790
c 366 10.2 47.6 50 9 A104791 A104791
c 367 10.2 47.6 50 9 A104793 A104793
c 368 10.2 47.6 50 9 A104794 A104794
c 369 10.2 47.6 50 9 A104795 A104795
c 370 10.2 47.6 50 9 A104796 A104796
c 371 10.2 47.6 50 9 A104797 A104797

```

```

A1446748 A1446748
B1695278 B1695278
AZ784259 AZ784259
A1644572 1740a01.x
AZ446218 1M0001012
AZ309417 1M0014012
A1775941 A1775941
B5968414 602845410
042385 042385.kie
AA878853 0188409.s
AA888208 0186e10.s
AA894396 0189a05.s
A1188838 0321112.x
AZ840530 2M0148E08
B1827814 604074011
B1827814 604074011
A1282013 q088e02.x
A1359345 A1359345 qy23h11.x
AV833320 AV833320
BH624245 100710E0
B3067044 B3067044
BM397811 BM397811 5009-0-47
A2434030 A2434030 1M0220B14
BH631591 1007085F0
A1091155 0018a09.x
A1182737 0b80a05.r
A1641110 ts64a01.x
A1884025 1c72e11.x
AW249739 2819751.f4
B5513935 B5513935 601451555
BF123084 BF123084 601761846
W64843 B696411.f1
BF969163 602269854
BF43935 602015624
A2826757 2M0102H17
BH798719 BH798719 1008112G0
AA657267 v123d07.f1
AA727650 AA727650 7097e07.f1
AA877951 0b95h02.s
A1288398 qv85d11.x
AA113042 AA113042 2065412.f1
AA231225 AA231225 mw37e04.f1
AA427743 2w22h001.s
AA429584 2w27h005.f1
AA513131 1b78409.s
B5970690 602273861
BM126198 11c7d11.x
A2481961 1M0406H07
BH748794 BH748794 SALK 04e37
BH862617 BH862617 SALK 09e02
A1024340 A1024340
A102442 A102442
A102444 A102444
A102445 A102445
A102448 A102448
A102476 A102476
A102487 A102487
A103896 A103896
A104098 A104098
A104177 A104177
A104182 A104182
A104190 A104190
A104786 A104786
A104787 A104787
A104788 A104788
A104789 A104789
A104790 A104790
A104791 A104791
A104793 A104793
A104794 A104794
A104795 A104795
A104796 A104796
A104797 A104797

```

```

c 372 10 47.6 50 9 A0104798 A0104798 A0104798 c 445 9.8 46.7 49 9 A1020814 A0504003.1
c 373 10 47.6 50 9 A0104799 A0104799 A0104799 c 446 9.8 46.7 49 9 A0104527 A0504004.1
c 374 10 47.6 50 9 A0104800 A0104800 A0104800 c 447 9.8 46.7 49 9 A0107570 A10401.8
c 375 10 47.6 50 9 A0104802 A0104802 A0104802 c 448 9.8 46.7 49 9 A0478678 A010404.1
c 376 10 47.6 50 9 A0104803 A0104803 A0104803 c 449 9.8 46.7 49 9 A0624773 A0504006.8
c 377 10 47.6 50 9 A0104871 A0104871 A0104871 c 450 9.8 46.7 50 9 A0102442 A010224.2
c 378 10 47.6 50 9 A0105704 A0105704 A0105704 c 451 9.8 46.7 50 9 A0102578 A0102578
c 379 10 47.6 50 9 A0105704 A0105704 A0105704 c 452 9.8 46.7 50 9 A0102579 A0102579
c 380 10 47.6 50 9 A0106107 A0106107 A0106107 c 453 9.8 46.7 50 9 A0104196 A0104196
c 381 10 47.6 50 9 A0106109 A0106109 A0106109 c 454 9.8 46.7 50 9 A0104197 A0104197
c 382 10 47.6 50 9 A0106110 A0106110 A0106110 c 455 9.8 46.7 50 9 A0104199 A0104199
c 383 10 47.6 50 9 A0106114 A0106114 A0106114 c 456 9.8 46.7 50 9 A0104204 A0104204
c 384 10 47.6 50 9 A0106271 A0106271 A0106271 c 457 9.8 46.7 50 9 A0104206 A0104206
c 385 10 47.6 50 9 A0106347 A0106347 A0106347 c 458 9.8 46.7 50 9 A0104208 A0104208
c 386 10 47.6 50 9 A0106606 A0106606 A0106606 c 459 9.8 46.7 50 9 A0104474 A0104474
c 387 10 47.6 50 9 A0106825 A0106825 A0106825 c 460 9.8 46.7 50 9 A0104480 A0104480
c 388 10 47.6 50 9 A0106921 A0106921 A0106921 c 461 9.8 46.7 50 9 A0104044 A0104044
c 389 10 47.6 50 9 A0107006 A0107006 A0107006 c 462 9.8 46.7 50 9 A0104079 A0104079
c 390 10 47.6 50 9 A0107009 A0107009 A0107009 c 463 9.8 46.7 50 9 A0104086 A0104086
c 391 10 47.6 50 9 A0107147 A0107147 A0107147 c 464 9.8 46.7 50 9 A0104491 A0104491
c 392 10 47.6 50 9 A0107546 A0107546 A0107546 c 465 9.8 46.7 50 9 A0104709 A0104709
c 393 10 47.6 50 9 A0107587 A0107587 A0107587 c 466 9.8 46.7 50 9 A0105588 A0105588
c 394 10 47.6 50 9 A0107588 A0107588 A0107588 c 467 9.8 46.7 50 9 A0105638 A0105638
c 395 10 47.6 50 9 A0107589 A0107589 A0107589 c 468 9.8 46.7 50 9 A0105639 A0105639
c 396 10 47.6 50 9 A0108009 A0108009 A0108009 c 469 9.8 46.7 50 9 A0105666 A0105666
c 397 10 47.6 50 9 A0108071 A0108071 A0108071 c 470 9.8 46.7 50 9 A0106035 A0106035
c 398 10 47.6 50 10 AV969171 AV969171 AV969171 c 471 9.8 46.7 50 9 A0106285 A0106285
c 399 10 47.6 50 17 B0748752 SALK_0466 B0748752 SALK_0466 c 472 9.8 46.7 50 9 A0106596 A0106596
c 400 10 47.6 50 17 A0771848 A0771848 A0771848 c 473 9.8 46.7 50 9 A0106644 A0106644
c 401 9.8 46.7 20 17 A2408143 A0010A21 A2408143 A0010A21 c 474 9.8 46.7 50 9 A0106645 A0106645
c 402 9.8 46.7 41 9 A1494304 A1494304 A1494304 c 475 9.8 46.7 50 9 A0106646 A0106646
c 403 9.8 46.7 41 9 A1494304 A1494304 A1494304 c 476 9.8 46.7 50 9 A0106687 A0106687
c 404 9.8 46.7 41 9 A1918597 A1918597 A1918597 c 477 9.8 46.7 50 9 A0106762 A0106762
c 405 9.8 46.7 41 9 A04543890 A04543890 A04543890 c 478 9.8 46.7 50 9 A0107046 A0107046
c 406 9.8 46.7 33 13 B1089017 B1089017 B1089017 c 479 9.8 46.7 50 9 A0107432 A0107432
c 407 9.8 46.7 33 17 A2436372 A2436372 A2436372 c 480 9.8 46.7 50 9 A0107433 A0107433
c 408 9.8 46.7 34 9 A1683575 A1683575 A1683575 c 481 9.8 46.7 50 9 A0107434 A0107434
c 409 9.8 46.7 34 9 A1794680 A1794680 A1794680 c 482 9.8 46.7 50 9 A0107922 A0107922
c 410 9.8 46.7 35 12 B6770056 B6770056 B6770056 c 483 9.8 46.7 50 9 A0107923 A0107923
c 411 9.8 46.7 35 14 D19567 D19567 D19567 c 484 9.8 46.7 50 9 A0108053 A0108053
c 412 9.8 46.7 36 12 B6819968 B6819968 B6819968 c 485 9.8 46.7 50 9 A0615310 A0615310
c 413 9.8 46.7 36 17 A2591847 A2591847 A2591847 c 486 9.8 46.7 50 13 B1416671 B1416671
c 414 9.8 46.7 36 17 A2591847 A2591847 A2591847 c 487 9.8 46.7 50 17 A040020 A040020
c 415 9.8 46.7 37 12 B6340929 B6340929 B6340929 c 488 9.8 46.7 50 17 A24367152 A24367152
c 416 9.8 46.7 37 17 A025345 A025345 A025345 c 489 9.8 46.7 50 17 A2429020 A2429020
c 417 9.8 46.7 37 17 A0909158 A0909158 A0909158 c 490 9.8 46.7 50 17 A2649849 A2649849
c 418 9.8 46.7 37 17 A2591942 A2591942 A2591942 c 491 9.8 46.7 50 17 A2863707 A2863707
c 419 9.8 46.7 37 17 A2758338 A2758338 A2758338 c 492 9.8 46.7 50 17 A2772894 A2772894
c 420 9.8 46.7 38 10 A0245388 A0245388 A0245388 c 493 9.8 46.7 50 17 A2807263 A2807263
c 421 9.8 46.7 38 12 B6525570 B6525570 B6525570 c 494 9.8 46.7 50 10 A0064435 A0064435
c 422 9.8 46.7 38 17 A2759213 A2759213 A2759213 c 495 9.8 46.7 50 9 A1608697 A1608697
c 423 9.8 46.7 40 9 A0922996 A0922996 A0922996 c 496 9.8 46.7 50 17 B0213544 B0213544
c 424 9.8 46.7 40 9 A0796724 A0796724 A0796724 c 497 9.8 46.7 50 17 A2768008 A2768008
c 425 9.8 46.7 40 9 A008577 A008577 A008577 c 498 9.8 46.7 50 17 B0861244 B0861244
c 426 9.8 46.7 40 9 A1195081 A1195081 A1195081 c 499 9.8 46.7 50 17 B0861245 A1195081
c 427 9.8 46.7 40 9 A1778708 A1778708 A1778708 c 500 9.8 46.7 50 9 A1066788 A1066788
c 428 9.8 46.7 40 10 A0834225 A0834225 A0834225 c 501 9.8 46.7 50 9 A1422710 A1422710
c 429 9.8 46.7 40 12 B6709439 B6709439 B6709439 c 502 9.8 46.7 50 9 A1690428 A1690428
c 430 9.8 46.7 40 12 B6772038 B6772038 B6772038 c 503 9.8 46.7 50 9 A1912532 A1912532
c 431 9.8 46.7 40 17 A2780843 A2780843 A2780843 c 504 9.8 46.7 50 17 A2765924 A2765924
c 432 9.8 46.7 42 9 A1919350 A1919350 A1919350 c 505 9.8 46.7 50 17 A1640054 A1640054
c 433 9.8 46.7 42 13 B1824879 B1824879 B1824879 c 506 9.8 46.7 50 10 A0859826 A0859826
c 434 9.8 46.7 42 17 A2417609 A2417609 A2417609 c 507 9.8 46.7 50 17 A2827691 A2827691
c 435 9.8 46.7 43 9 A1744270 A1744270 A1744270 c 508 9.8 46.7 50 9 A1122781 A1122781
c 436 9.8 46.7 43 9 A0522067 A0522067 A0522067 c 509 9.8 46.7 50 9 A1014858 A1014858
c 437 9.8 46.7 44 9 A0053579 A0053579 A0053579 c 510 9.8 46.7 50 12 B616476 B616476
c 438 9.8 46.7 45 9 A1968998 A1968998 A1968998 c 511 9.8 46.7 50 14 W34704 W34704
c 439 9.8 46.7 45 12 B6669751 B6669751 B6669751 c 512 9.8 46.7 50 17 A2619022 A2619022
c 440 9.8 46.7 45 12 B63404212 B63404212 B63404212 c 513 9.8 46.7 50 10 B6534688 B6534688
c 441 9.8 46.7 46 12 B6354334 B6354334 B6354334 c 514 9.8 46.7 50 17 A2634998 A2634998
c 442 9.8 46.7 46 17 A2483975 A2483975 A2483975 c 515 9.8 46.7 50 17 B0172269 B0172269
c 443 9.8 46.7 48 17 A2606494 A2606494 A2606494 c 516 9.8 46.7 50 17 A0254842 A0254842
c 444 9.8 46.7 49 9 A0681490 A0681490 A0681490 c 517 9.8 46.7 50 9 A1655844 A1655844

```



|       |     |      |    |    |          |                     |       |     |      |    |    |          |
|-------|-----|------|----|----|----------|---------------------|-------|-----|------|----|----|----------|
| c 518 | 9.6 | 45.7 | 47 | 9  | A1119024 | A1119024 uc22h02.y  | 591   | 9.6 | 45.7 | 48 | 17 | BH611485 |
| c 519 | 9.6 | 45.7 | 37 | 9  | A1357425 | A1357425 qu01c09.x  | 592   | 9.6 | 45.7 | 48 | 17 | BH611972 |
| c 520 | 9.6 | 45.7 | 37 | 9  | A1558328 | A1558328 hb78a08.x  | 593   | 9.6 | 45.7 | 48 | 17 | BH612029 |
| c 521 | 9.6 | 45.7 | 47 | 9  | A1619702 | A1619702 t952305.x  | 594   | 9.6 | 45.7 | 48 | 17 | BH612870 |
| c 522 | 9.6 | 45.7 | 47 | 9  | A1626589 | A1626589 fc05a12.x  | 595   | 9.6 | 45.7 | 48 | 17 | BH612921 |
| c 523 | 9.6 | 45.7 | 37 | 9  | A1884236 | A1884236 tc75j06.x  | 596   | 9.6 | 45.7 | 48 | 17 | BH617377 |
| c 524 | 9.6 | 45.7 | 39 | 9  | AA961533 | AA961533 bq74c11.s  | 597   | 9.6 | 45.7 | 48 | 17 | BH618181 |
| c 525 | 9.6 | 45.7 | 39 | 9  | A1797893 | A1797893 AL797893   | 598   | 9.6 | 45.7 | 48 | 17 | BH618375 |
| c 526 | 9.6 | 45.7 | 39 | 9  | A0009955 | A0009955 A0009955   | 599   | 9.6 | 45.7 | 48 | 17 | BH748194 |
| c 527 | 9.6 | 45.7 | 39 | 17 | A2611736 | A2611736 lM0438F18  | 600   | 9.6 | 45.7 | 48 | 17 | BH748267 |
| c 528 | 9.6 | 45.7 | 39 | 17 | BH866488 | BH866488 SALK_1013  | 601   | 9.6 | 45.7 | 48 | 17 | BH748535 |
| c 529 | 9.6 | 45.7 | 40 | 9  | A1002051 | A1002051 ov19h03.s  | 602   | 9.6 | 45.7 | 48 | 17 | BH748892 |
| c 530 | 9.6 | 45.7 | 40 | 9  | A16J9582 | A16J9582 tw28c02.x  | 603   | 9.6 | 45.7 | 48 | 17 | BH750103 |
| c 531 | 9.6 | 45.7 | 40 | 9  | AA250622 | AA250622 mz81t10.t  | 604   | 9.6 | 45.7 | 48 | 17 | BH751896 |
| c 532 | 9.6 | 45.7 | 40 | 17 | AZ308191 | AZ308191 lM0010M21  | 605   | 9.6 | 45.7 | 48 | 17 | BH752053 |
| c 533 | 9.6 | 45.7 | 41 | 9  | A1596178 | A1596178 uk23303.x  | 606   | 9.6 | 45.7 | 48 | 17 | BH752652 |
| c 534 | 9.6 | 45.7 | 41 | 13 | B1050988 | B1050988 B1050988   | 607   | 9.6 | 45.7 | 48 | 17 | BH752875 |
| c 535 | 9.6 | 45.7 | 41 | 17 | BH212967 | BH212967 SALK_0086  | 608   | 9.6 | 45.7 | 48 | 17 | BH752902 |
| c 536 | 9.6 | 45.7 | 41 | 17 | BH626532 | BH626532 l00711020  | 609   | 9.6 | 45.7 | 48 | 17 | BH753678 |
| c 537 | 9.6 | 45.7 | 42 | 9  | AL801104 | AL801104 AL801104   | c 610 | 9.6 | 45.7 | 49 | 9  | AA692349 |
| c 538 | 9.6 | 45.7 | 42 | 17 | BH624960 | BH624960 l00709160  | 611   | 9.6 | 45.7 | 49 | 9  | AA889285 |
| c 539 | 9.6 | 45.7 | 42 | 17 | BH855809 | BH855809 SALK_0845  | c 612 | 9.6 | 45.7 | 49 | 9  | AA986145 |
| c 540 | 9.6 | 45.7 | 43 | 9  | AA863355 | AA863355 oh04c09.s  | c 613 | 9.6 | 45.7 | 49 | 9  | A1763118 |
| c 541 | 9.6 | 45.7 | 43 | 9  | AA974942 | AA974942 cd34b12.s  | 614   | 9.6 | 45.7 | 49 | 9  | A1801184 |
| c 542 | 9.6 | 45.7 | 43 | 9  | A1038493 | A1038493 ox38a09.s  | 615   | 9.6 | 45.7 | 49 | 9  | A1815199 |
| c 543 | 9.6 | 45.7 | 43 | 9  | A1222474 | A1222474 qn21c08.x  | 616   | 9.6 | 45.7 | 49 | 9  | A1876100 |
| c 544 | 9.6 | 45.7 | 43 | 9  | A1311377 | A1311377 j088c07.x  | 617   | 9.6 | 45.7 | 49 | 9  | A1876102 |
| c 545 | 9.6 | 45.7 | 43 | 9  | AA541608 | AA541608 h186a06.s  | c 618 | 9.6 | 45.7 | 49 | 14 | B0737802 |
| c 546 | 9.6 | 45.7 | 43 | 10 | AW249398 | AW249398 2819381.s  | c 619 | 9.6 | 45.7 | 49 | 17 | A2491285 |
| c 547 | 9.6 | 45.7 | 43 | 17 | AZ599409 | AZ599409 lM0414B14  | 620   | 9.6 | 45.7 | 49 | 17 | A2758301 |
| c 548 | 9.6 | 45.7 | 43 | 17 | AZ873891 | AZ873891 2M0187N14  | 621   | 9.6 | 45.7 | 49 | 17 | A2767999 |
| c 549 | 9.6 | 45.7 | 43 | 17 | BH213213 | BH213213 SALK_0089  | 622   | 9.6 | 45.7 | 49 | 17 | BH168842 |
| c 550 | 9.6 | 45.7 | 43 | 17 | BH610453 | BH610453 SALK_0169  | 623   | 9.6 | 45.7 | 49 | 17 | BH168970 |
| c 551 | 9.6 | 45.7 | 44 | 10 | BE614040 | BE614040 601503968  | 624   | 9.6 | 45.7 | 49 | 17 | BH171096 |
| c 552 | 9.6 | 45.7 | 44 | 17 | AZ501395 | AZ501395 lM0340B14  | 625   | 9.6 | 45.7 | 49 | 17 | BH171188 |
| c 553 | 9.6 | 45.7 | 44 | 17 | BH855815 | BH855815 SALK_0845  | 626   | 9.6 | 45.7 | 49 | 17 | BH171532 |
| c 554 | 9.6 | 45.7 | 46 | 9  | AA761099 | AA761099 nyl3h09.s  | 627   | 9.6 | 45.7 | 49 | 17 | BH172064 |
| c 555 | 9.6 | 45.7 | 46 | 9  | A1287842 | A1287842 qv07a03.x  | 628   | 9.6 | 45.7 | 49 | 17 | BH172398 |
| c 556 | 9.6 | 45.7 | 46 | 9  | A1471447 | A1471447 tml1104.x  | 629   | 9.6 | 45.7 | 49 | 17 | BH172551 |
| c 557 | 9.6 | 45.7 | 46 | 9  | A1521423 | A1521423 t160a09.x  | 630   | 9.6 | 45.7 | 49 | 17 | BH172699 |
| c 558 | 9.6 | 45.7 | 46 | 9  | A1549046 | A1549046 t176a11.x  | 631   | 9.6 | 45.7 | 49 | 17 | BH172796 |
| c 559 | 9.6 | 45.7 | 46 | 9  | A1567157 | A1567157 t1750b08.x | 632   | 9.6 | 45.7 | 49 | 17 | BH172797 |
| c 560 | 9.6 | 45.7 | 46 | 9  | A1669413 | A1669413 t352c05.x  | 633   | 9.6 | 45.7 | 49 | 17 | BH213710 |
| c 561 | 9.6 | 45.7 | 46 | 9  | AL660536 | AL660536 AL660536   | 634   | 9.6 | 45.7 | 49 | 17 | BH251268 |
| c 562 | 9.6 | 45.7 | 46 | 14 | B89517   | B89517 ym96a109.r1  | 635   | 9.6 | 45.7 | 49 | 17 | BH251862 |
| c 563 | 9.6 | 45.7 | 46 | 17 | AZ511270 | AZ511270 lM0356B17  | 636   | 9.6 | 45.7 | 49 | 17 | BH252062 |
| c 564 | 9.6 | 45.7 | 46 | 17 | AZ662404 | AZ662404 lM0541M15  | 637   | 9.6 | 45.7 | 49 | 17 | BH252294 |
| c 565 | 9.6 | 45.7 | 47 | 13 | B1247494 | B1247494 602960118  | 638   | 9.6 | 45.7 | 49 | 17 | BH252649 |
| c 566 | 9.6 | 45.7 | 47 | 14 | T98319   | T98319 ye59a01.r1   | 639   | 9.6 | 45.7 | 49 | 17 | BH252708 |
| c 567 | 9.6 | 45.7 | 47 | 17 | AZ311454 | AZ311454 lM0326B24  | 640   | 9.6 | 45.7 | 49 | 17 | BH252768 |
| c 568 | 9.6 | 45.7 | 47 | 17 | AZ838688 | AZ838688 2M0144B02  | 641   | 9.6 | 45.7 | 49 | 17 | BH252868 |
| c 569 | 9.6 | 45.7 | 47 | 17 | BH618704 | BH618704 SALK_0395  | 642   | 9.6 | 45.7 | 49 | 17 | BH610503 |
| c 570 | 9.6 | 45.7 | 47 | 17 | AL757848 | AL757848 Atc01d098  | 643   | 9.6 | 45.7 | 49 | 17 | BH613458 |
| c 571 | 9.6 | 45.7 | 48 | 17 | BH165913 | BH165913 SALK_0020  | 644   | 9.6 | 45.7 | 49 | 17 | BH613648 |
| c 572 | 9.6 | 45.7 | 48 | 17 | BH170455 | BH170455 SALK_0029  | 645   | 9.6 | 45.7 | 49 | 17 | BH748756 |
| c 573 | 9.6 | 45.7 | 48 | 17 | BH170749 | BH170749 SALK_0033  | 646   | 9.6 | 45.7 | 49 | 17 | BH749974 |
| c 574 | 9.6 | 45.7 | 48 | 17 | BH211911 | BH211911 SALK_0068  | 647   | 9.6 | 45.7 | 49 | 17 | BH750758 |
| c 575 | 9.6 | 45.7 | 48 | 17 | BH212362 | BH212362 SALK_0074  | 648   | 9.6 | 45.7 | 49 | 17 | BH751604 |
| c 576 | 9.6 | 45.7 | 48 | 17 | BH214058 | BH214058 SALK_0101  | 649   | 9.6 | 45.7 | 49 | 17 | BH751678 |
| c 577 | 9.6 | 45.7 | 48 | 17 | BH251093 | BH251093 SALK_0109  | 650   | 9.6 | 45.7 | 49 | 17 | BH752095 |
| c 578 | 9.6 | 45.7 | 48 | 17 | BH251689 | BH251689 SALK_0119  | 651   | 9.6 | 45.7 | 49 | 17 | BH752242 |
| c 579 | 9.6 | 45.7 | 48 | 17 | BH252178 | BH252178 SALK_0128  | 652   | 9.6 | 45.7 | 49 | 17 | BH752880 |
| c 580 | 9.6 | 45.7 | 48 | 17 | BH252179 | BH252179 SALK_0128  | 653   | 9.6 | 45.7 | 49 | 17 | BH753074 |
| c 581 | 9.6 | 45.7 | 48 | 17 | BH252187 | BH252187 SALK_0129  | 654   | 9.6 | 45.7 | 49 | 17 | AL758948 |
| c 582 | 9.6 | 45.7 | 48 | 17 | BH252578 | BH252578 SALK_0136  | 655   | 9.6 | 45.7 | 50 | 9  | AU102584 |
| c 583 | 9.6 | 45.7 | 48 | 17 | BH254186 | BH254186 SALK_0161  | 656   | 9.6 | 45.7 | 50 | 9  | AU102736 |
| c 584 | 9.6 | 45.7 | 48 | 17 | BH254607 | BH254607 SALK_0188  | 657   | 9.6 | 45.7 | 50 | 9  | AU102945 |
| c 585 | 9.6 | 45.7 | 48 | 17 | BH254917 | BH254917 SALK_0174  | c 658 | 9.6 | 45.7 | 50 | 9  | AU103582 |
| c 586 | 9.6 | 45.7 | 48 | 17 | BH610835 | BH610835 SALK_0181  | c 659 | 9.6 | 45.7 | 50 | 9  | AU103840 |
| c 587 | 9.6 | 45.7 | 48 | 17 | BH610840 | BH610840 SALK_0181  | c 660 | 9.6 | 45.7 | 50 | 9  | AU103842 |
| c 588 | 9.6 | 45.7 | 48 | 17 | BH610916 | BH610916 SALK_0182  | c 661 | 9.6 | 45.7 | 50 | 9  | AU103949 |
| c 589 | 9.6 | 45.7 | 48 | 17 | BH611116 | BH611116 SALK_0209  | c 662 | 9.6 | 45.7 | 50 | 9  | AU103955 |
| c 590 | 9.6 | 45.7 | 48 | 17 | BH611432 | BH611432 SALK_0309  | c 663 | 9.6 | 45.7 | 50 | 9  | AU104189 |

|       |     |      |    |    |          |          |       |     |      |    |    |          |
|-------|-----|------|----|----|----------|----------|-------|-----|------|----|----|----------|
| c 664 | 9.6 | 45.7 | 50 | 9  | A0104445 | A0104445 | 787   | 9.6 | 45.7 | 50 | 17 | BH251680 |
| c 665 | 9.6 | 45.7 | 50 | 9  | A0104446 | A0104446 | 788   | 9.6 | 45.7 | 50 | 17 | BH611805 |
| c 666 | 9.6 | 45.7 | 50 | 9  | A0104610 | A0104610 | 789   | 9.6 | 45.7 | 50 | 17 | BH612727 |
| c 667 | 9.6 | 45.7 | 50 | 9  | A0104703 | A0104703 | 790   | 9.6 | 45.7 | 50 | 17 | BH617418 |
| c 668 | 9.6 | 45.7 | 50 | 9  | A0104704 | A0104704 | 791   | 9.6 | 45.7 | 50 | 17 | BH619272 |
| c 669 | 9.6 | 45.7 | 50 | 9  | A0104705 | A0104705 | 792   | 9.6 | 45.7 | 50 | 17 | BH619443 |
| c 670 | 9.6 | 45.7 | 50 | 9  | A0104706 | A0104706 | 793   | 9.6 | 45.7 | 50 | 17 | BH754379 |
| c 671 | 9.6 | 45.7 | 50 | 9  | A0104707 | A0104707 | 794   | 9.6 | 45.7 | 50 | 17 | BH862794 |
| c 672 | 9.6 | 45.7 | 50 | 9  | A0104708 | A0104708 | 795   | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 673 | 9.6 | 45.7 | 50 | 9  | A0104710 | A0104710 | 796   | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 674 | 9.6 | 45.7 | 50 | 9  | A0104780 | A0104780 | c 747 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 675 | 9.6 | 45.7 | 50 | 9  | A0104838 | A0104838 | c 748 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 676 | 9.6 | 45.7 | 50 | 9  | A0104839 | A0104839 | c 749 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 677 | 9.6 | 45.7 | 50 | 9  | A0104840 | A0104840 | c 750 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 678 | 9.6 | 45.7 | 50 | 9  | A0104841 | A0104841 | c 751 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 679 | 9.6 | 45.7 | 50 | 9  | A0104842 | A0104842 | c 752 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 680 | 9.6 | 45.7 | 50 | 9  | A0104843 | A0104843 | c 753 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 681 | 9.6 | 45.7 | 50 | 9  | A0104973 | A0104973 | c 754 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 682 | 9.6 | 45.7 | 50 | 9  | A0105172 | A0105172 | c 755 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 683 | 9.6 | 45.7 | 50 | 9  | A0105173 | A0105173 | c 756 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 684 | 9.6 | 45.7 | 50 | 9  | A0105200 | A0105200 | c 757 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 685 | 9.6 | 45.7 | 50 | 9  | A0105203 | A0105203 | c 758 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 686 | 9.6 | 45.7 | 50 | 9  | A0105208 | A0105208 | c 759 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 687 | 9.6 | 45.7 | 50 | 9  | A0105446 | A0105446 | c 760 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 688 | 9.6 | 45.7 | 50 | 9  | A0105739 | A0105739 | c 761 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 689 | 9.6 | 45.7 | 50 | 9  | A0105740 | A0105740 | c 762 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 690 | 9.6 | 45.7 | 50 | 9  | A0105741 | A0105741 | c 763 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 691 | 9.6 | 45.7 | 50 | 9  | A0105799 | A0105799 | c 764 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 692 | 9.6 | 45.7 | 50 | 9  | A0106644 | A0106644 | c 765 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 693 | 9.6 | 45.7 | 50 | 9  | A0106646 | A0106646 | c 766 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 694 | 9.6 | 45.7 | 50 | 9  | A0106731 | A0106731 | c 767 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 695 | 9.6 | 45.7 | 50 | 9  | A0106951 | A0106951 | c 768 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 696 | 9.6 | 45.7 | 50 | 9  | A0107834 | A0107834 | c 769 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 697 | 9.6 | 45.7 | 50 | 9  | A0107835 | A0107835 | c 770 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 698 | 9.6 | 45.7 | 50 | 9  | A0107836 | A0107836 | c 771 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 699 | 9.6 | 45.7 | 50 | 9  | A0107837 | A0107837 | c 772 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 700 | 9.6 | 45.7 | 50 | 9  | A0107838 | A0107838 | c 773 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 701 | 9.6 | 45.7 | 50 | 9  | A0107839 | A0107839 | c 774 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 702 | 9.6 | 45.7 | 50 | 9  | A0107841 | A0107841 | c 775 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 703 | 9.6 | 45.7 | 50 | 9  | A0107842 | A0107842 | c 776 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 704 | 9.6 | 45.7 | 50 | 9  | A0107845 | A0107845 | c 777 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 705 | 9.6 | 45.7 | 50 | 9  | A0107846 | A0107846 | c 778 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 706 | 9.6 | 45.7 | 50 | 9  | A0107847 | A0107847 | c 779 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 707 | 9.6 | 45.7 | 50 | 9  | A0107848 | A0107848 | c 780 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 708 | 9.6 | 45.7 | 50 | 9  | A0107850 | A0107850 | c 781 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 709 | 9.6 | 45.7 | 50 | 9  | A0107851 | A0107851 | c 782 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 710 | 9.6 | 45.7 | 50 | 9  | A0107852 | A0107852 | c 783 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 711 | 9.6 | 45.7 | 50 | 9  | A0107853 | A0107853 | c 784 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 712 | 9.6 | 45.7 | 50 | 9  | A0107854 | A0107854 | c 785 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 713 | 9.6 | 45.7 | 50 | 9  | A0107859 | A0107859 | c 786 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 714 | 9.6 | 45.7 | 50 | 9  | A0107860 | A0107860 | c 787 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 715 | 9.6 | 45.7 | 50 | 9  | A0107864 | A0107864 | c 788 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 716 | 9.6 | 45.7 | 50 | 9  | A0107865 | A0107865 | c 789 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 717 | 9.6 | 45.7 | 50 | 9  | A0107867 | A0107867 | c 790 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 718 | 9.6 | 45.7 | 50 | 9  | A0107874 | A0107874 | c 791 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 719 | 9.6 | 45.7 | 50 | 9  | A0107875 | A0107875 | c 792 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 720 | 9.6 | 45.7 | 50 | 9  | A0107876 | A0107876 | c 793 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 721 | 9.6 | 45.7 | 50 | 9  | A0107878 | A0107878 | c 794 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 722 | 9.6 | 45.7 | 50 | 9  | A0107879 | A0107879 | c 795 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 723 | 9.6 | 45.7 | 50 | 9  | A0107880 | A0107880 | c 796 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 724 | 9.6 | 45.7 | 50 | 9  | A0107881 | A0107881 | c 797 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 725 | 9.6 | 45.7 | 50 | 9  | A0108010 | A0108010 | c 798 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 726 | 9.6 | 45.7 | 50 | 9  | A0108016 | A0108016 | c 799 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 727 | 9.6 | 45.7 | 50 | 9  | A0108017 | A0108017 | c 800 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 728 | 9.6 | 45.7 | 50 | 9  | A0108018 | A0108018 | c 801 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 729 | 9.6 | 45.7 | 50 | 9  | A0108019 | A0108019 | c 802 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 730 | 9.6 | 45.7 | 50 | 14 | HJ060889 | HJ060889 | c 803 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 731 | 9.6 | 45.7 | 50 | 17 | A2824510 | A2824510 | c 804 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 732 | 9.6 | 45.7 | 50 | 17 | BH168844 | BH168844 | c 805 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 733 | 9.6 | 45.7 | 50 | 17 | BH169178 | BH169178 | c 806 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 734 | 9.6 | 45.7 | 50 | 17 | BH171186 | BH171186 | c 807 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 735 | 9.6 | 45.7 | 50 | 17 | BH171659 | BH171659 | c 808 | 9.6 | 45.7 | 50 | 17 | AL754877 |
| c 736 | 9.6 | 45.7 | 50 | 17 | BH172924 | BH172924 | c 809 | 9.6 | 45.7 | 50 | 17 | AL754877 |



|       |     |       |    |    |          |            |   |   |   |  |
|-------|-----|-------|----|----|----------|------------|---|---|---|--|
| c 956 | 9.2 | 4.3.8 | 49 | 17 | A2429959 | 1M0214N08  | 4 | 6 | 1 | Shirokane-dai, Minatoku, Tokyo 108 86.09, Japan                          |
|       |     |       |    |    |          |            |   |   |   |  |
| c 957 | 9.2 | 4.3.8 | 49 | 17 | A2514516 | 1M0361JA12 |   |   |   | Email: ysuzyuk@ims.s.u.tokyo.ac.jp                                       |
| c 958 | 9.2 | 4.3.8 | 49 | 17 | A2779704 | 2M0016N20  |   |   |   | Suzuki, Y., Yoshitomo Nakatawa, K., Maruyama, K., Suyama, A., and Suqano |
| c 959 | 9.2 | 4.3.8 | 49 | 17 | A2781715 | 2M0021F16  |   |   |   | S., construction and characterization of a full length enriched and      |
| c 960 | 9.2 | 4.3.8 | 49 | 17 | A2828829 | 2M0106G05  |   |   |   | a 5' end enriched cDNA library. Gene 200 (1-2), 149-156. (1997).         |
| c 961 | 9.2 | 4.3.8 | 49 | 17 | A2956871 | 2M0224K01  |   |   |   | FEATURES   |
| c 962 | 9.2 | 4.3.8 | 40 | 9  | A2956871 | 2M0224K01  |   |   |   | Source   |
| c 963 | 9.2 | 4.3.8 | 40 | 9  | AA650286 | ns88102.8  |   |   |   | 1..50  |
| c 964 | 9.2 | 4.3.8 | 40 | 9  | AA806226 | ns29112.8  |   |   |   | Zoonism "Homo sapiens"   |
| c 965 | 9.2 | 4.3.8 | 40 | 9  | A1253323 | 9141111.8  |   |   |   | DB, Xref: "taxon:9606"   |
| c 966 | 9.2 | 4.3.8 | 40 | 9  | A1628157 | 15222009.8 |   |   |   | Zoonism "Homo sapiens"   |
| c 967 | 9.2 | 4.3.8 | 40 | 9  | A1697005 | w676407.8  |   |   |   | Zoonism "Homo sapiens"   |
| c 968 | 9.2 | 4.3.8 | 40 | 9  | AA523358 | nt67601.8  |   |   |   | Zoonism "Homo sapiens"   |
| c 969 | 9.2 | 4.3.8 | 40 | 9  | AA544934 | v170609.1  |   |   |   | Zoonism "Homo sapiens"   |
| c 970 | 9.2 | 4.3.8 | 40 | 10 | AA855764 | AA855764   |   |   |   | Note: "Differential display comparison of untreated and                  |
| c 971 | 9.2 | 4.3.8 | 40 | 13 | BM496033 | BM496033   |   |   |   | diallylthymine treated 0947 cells"                                       |
| c 972 | 9.2 | 4.3.8 | 40 | 17 | A2776907 | 1A2776907  |   |   |   | BASE COORDINATE  |
| c 973 | 9.2 | 4.3.8 | 40 | 17 | AA826733 | nt67601.8  |   |   |   | ORIGIN   |
| c 974 | 9.2 | 4.3.8 | 41 | 9  | AA826890 | nt67601.8  |   |   |   | Query Match  |
| c 975 | 9.2 | 4.3.8 | 41 | 9  | AA829551 | nt67601.8  |   |   |   | Best Local Similarity  |
| c 976 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | Matches  |
| c 977 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 16; Conservative   |
| c 978 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Mismatches  |
| c 979 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 4; Indels  |
| c 980 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 981 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 982 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 983 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 984 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 985 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 986 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 987 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 988 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 989 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 990 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 991 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 992 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 993 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 994 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 995 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 996 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 997 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 998 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| c 999 | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |
| 1000  | 9.2 | 4.3.8 | 41 | 9  | AA847578 | nt67601.8  |   |   |   | 0; Gaps  |

## RESULT 3

LOCUS  
 DEFINITION  
 ACCESSION  
 VERSION  
 KEYWORDS  
 SOURCE  
 ORGANISM  
 REFERENCE  
 AUTHORS  
 TITLE  
 JOURNAL  
 MEDLINE  
 COMMENT

AU104580  
 AU104580 Sogano Homo sapiens cDNA library Homo sapiens cDNA clone  
 HE01261, mRNA sequence.  
 AU104580  
 AU104580.1 GI:13554101  
 EST.  
 human.  
 Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo;  
 1 (bases 1 to 50)  
 Suzuki, Y., Taira, H., Tsunoda, I., Mizushima-Sugano, J., Sese, J., Hata  
 H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki  
 Y., Nakamura, Y., Suyama, A. and Sudano, S.  
 Diverse transcriptional initiation revealed by fine, large-scale  
 mapping of mRNA start sites  
 EMBO Rep. 2 (5), 388-393 (2001)  
 Contact: Yutaka Suzuki  
 Department of Virology  
 Institute of Medical Science, University of Tokyo  
 4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan  
 Email: ysuzuki@ims.u-tokyo.ac.jp  
 S. Construction and characterization of a full length-enriched and  
 a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

## FEATURES

Source  
 1..50  
 /organism "Homo sapiens"  
 /db\_xref "taxon:9606"  
 /clone "HE01261"  
 /clone\_lib "Sogano Homo sapiens cDNA library"  
 /note "Differential display comparison of untreated and  
 dimethylformate treated 0947 cells"  
 BASE COUNT 11 a 10 c 21 q 8 t

Query Match 62.9%; Score 14.2; DB 7; Length 50;  
 Best Local Similarity 83.3%; Pred. No. 8.1e+04;  
 Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGATGACAGGCGGCG 18  
 TTTT TTTTTT TTT  
 DB 42 GAGGATGACAGGCGGCG 15

## RESULT 4

LOCUS  
 DEFINITION  
 ACCESSION  
 VERSION  
 KEYWORDS  
 SOURCE  
 ORGANISM  
 REFERENCE  
 AUTHORS  
 TITLE  
 JOURNAL  
 COMMENT

AZ761059  
 AZ761059 Mouse 10kb plasmid m061M library Mus musculus genomic  
 clone m061M0555108 F, DNA sequence.  
 AZ761059  
 AZ761059.1 GI:12869569  
 GSS.  
 house mouse.  
 Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus;  
 1 (bases 1 to 24)  
 Dunn, D., Aoyagi, A., Barboi, M., Boacorn, L., Buzal, R., Hami, C.,  
 Islam, R., Londeave, S., Mahmoud, M., Mowen, E., Pedersen, L., Reilly  
 M., Rose, M., Rose, K., Stokes, R., Timney, A., von Niederhausern, A.,  
 and Wright, D., Weiss, K.,  
 Mouse whole genome scaffolding with paired end reads from 10kb  
 plasmid inserts  
 unpublished (2000)  
 Contact: Robert B. Weiss  
 University of Utah Genome Center  
 University of Utah  
 RM, 308, Biomedical Polymers Research Bldg., 20 S., 2030 E., SLA, 01  
 #4112, USA

## FEATURES

Source  
 1..24  
 /organism "Mus musculus"  
 /strain "C57BL/6J"  
 /db\_xref "taxon:10090"  
 /clone "m061M0555108"  
 /clone\_lib "Mouse 10kb plasmid m061M library"  
 /sex "Male"  
 /lat\_host "F. Coli strain XL10-Gold, 11-resistant, F-"  
 /note "Vector: pMD20v; Purified genomic DNA from M.  
 musculus C57BL/6J (male) was obtained from the Jackson  
 Laboratory Mouse DNA Resource  
 (http://www.jax.org/resources/documents/dnares/). The DNA  
 was hydrolytically sheared by repeated passage through a  
 0.005 inch orifice at constant velocity. The sheared DNA  
 was blunt end-repaired with T4 DNA polymerase and 14  
 polynucleotide kinase. Adaptor oligonucleotides were  
 ligated to the blunt ends in high molar excess. The  
 ligated DNA was purified and size-selected for a 9.5 to  
 10.5 kb range using preparative agarose gel  
 electrophoresis. Vector DNA was prepared from a derivative  
 of pMD22 (q14742114|db|AF126072.1); a copy-number  
 inducible derivative of plasmid p1. The vector was ligated  
 with adaptors complementary to the insert adaptors and  
 purified. The sheared, adaptor mouse DNA was annealed to  
 adaptor vector DNA, and transformed into  
 chemically-competent E. coli XL10-Gold (Stratagene) cells  
 and selected for ampicillin resistance."  
 BASE COUNT 2 a 7 c 11 q 4 t

Query Match 61.0%; Score 12.8; DB 17; Length 24;  
 Best Local Similarity 87.5%; Pred. No. 9.9e+04;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 CCAAGGCAAGGCGG 19  
 TTTTTT TTTT  
 DB 1 CCAAGGCAAGGCGG 16

RESULT 5  
 LOCUS  
 DEFINITION  
 ACCESSION  
 VERSION  
 KEYWORDS  
 SOURCE  
 ORGANISM  
 REFERENCE  
 AUTHORS  
 TITLE  
 JOURNAL  
 MEDLINE  
 COMMENT

AU104453  
 AU104453 Sogano Homo sapiens cDNA library Homo sapiens cDNA clone  
 C04P7121, mRNA sequence.  
 AU104453  
 AU104453.1 GI:13554974  
 EST.  
 human.  
 Homo sapiens  
 Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo;  
 1 (bases 1 to 50)  
 Suzuki, Y., Taira, H., Tsunoda, I., Mizushima-Sugano, J., Sese, J., Hata  
 H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki  
 Y., Nakamura, Y., Suyama, A. and Sudano, S.  
 Diverse transcriptional initiation revealed by fine, large-scale  
 mapping of mRNA start sites  
 EMBO Rep. 2 (5), 388-393 (2001)  
 Contact: Yutaka Suzuki  
 Department of Virology  
 Institute of Medical Science, University of Tokyo  
 4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan  
 Email: ysuzuki@ims.u-tokyo.ac.jp









/lab\_host="b10b"  
/note="ordan: pancreas; Vector: pMW-SpB16; Site:1; Salt;  
site\_2: Not1; Cloned unidirectionally. Primer: oligo dt.  
Average insert size 1.72 kb. Life technologies catalog #: 11548 013"

BASE COUNT 9 a 14 c 17 g 5 t  
ORIGIN

Query Match 58.1%; Score 12.2; DB 9; Length 43;  
Best Local Similarity 82.4%; Pred. No. 2e+05;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5 CCAATGAGAGCGCGGT 19  
||||| |||||  
Db 4 CCAAGAGAGCGCGGT 20

RESULT 11  
AZ436403  
LOCUS 19 bp DNA linear GSS 29 SEP-2000  
DEFINITION M00060348 Mouse 10kb plasmid U09G1M Library Mus musculus genomic clone U09G1M00060348 R. DNA sequence.  
ACCESSION AZ436403  
VERSION AZ436403.1 GI:10405456  
KEYWORDS GSS.  
SOURCE house mouse.  
ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 19)  
AUTHORS Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Bival, B., Hamil, C., Islam, H., Longacre, S., Mahmoud, M., Mcanen, E., Pedersen, J., Reilly, M., Rose, M., Rose, R., Stokes, R., Timney, A., von Niederhausern, A., and Wright, D., Weiss, R.  
TITLE Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts

JOURNAL Unpublished (2000)  
COMMENT Contact: Robert B. Weiss  
University of Utah Genome Center  
University of Utah  
Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT 84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: rdunn-genetics.utah.edu  
Insert Length: 10000 Std Error: 0.00  
Plate: 0066 rows: 3 Column: 03  
Seq primer: CACAGAGAACACGATGAGC  
Class: plasmid ends  
High quality sequence stop: 19.  
Location/Qualifiers  
1..19  
/organism="Mus musculus"  
/strain="c57BL/6J"  
/db\_xref="taxon:10090"  
/clone="U09G1M00060348"  
/clone\_lib="Mouse 10kb plasmid U09G1M Library"  
/sex="Male"  
/lab\_host="E. Coli strain XL10-Gold, 11-resistant, F-"  
/note="Vector: pMW200; Purified genomic DNA from M. musculus c57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (<http://www.jax.org/resources/documents/duares/>). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with 14 DNA polymerase and 14 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWB42 (q14742114[qlaf129072.1]), a copy-number inducible derivative of plasmid R1. The vector was ligated

FEATURES  
Source  
1..19  
Location/Qualifiers

with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 5 a 6 c 4 q 6 t  
ORIGIN

Query Match 57.1%; Score 12; DB 17; Length 19;  
Best Local Similarity 100.0%; Pred. No. 2e+05;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGATAGAG 12  
||||| |||||  
Db 19 GAGGATAGAG 8

RESULT 15  
A1567849  
LOCUS 28 bp mRNA linear EST 26-MAR 1999  
DEFINITION t987607.x1 NCI-CGAP\_cw24 Homo sapiens cDNA clone IMAGE:2215812 related to 18Q15215, Q15215, SALIVARY PROTEIN-RICH PROTEIN 1, secreted, BSK1, L2, IAK1 repetitive element ; mRNA sequence.  
ACCESSION A1567849  
VERSION A1567849.1 GI:4526301  
KEYWORDS EST.  
SOURCE Homo sapiens  
ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 28)  
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>, National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index  
JOURNAL Unpublished (1997)  
COMMENT Contact: Robert Strausberg, Ph.D.  
Email: [cap@r-mail.nih.gov](mailto:cap@r-mail.nih.gov)  
Tissue Procurement: Christopher Moskalko, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.  
cDNA Library Preparation: Life Technologies, Inc.  
cDNA Library Arrayed by: Gled Lennon, Ph.D.  
DNA Sequencing by: Washington University Genome Sequencing Center  
Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/IMAGE at: [www-bio.lbl.gov/abrp/image/image.html](http://www-bio.lbl.gov/abrp/image/image.html)

FEATURES  
Source  
1..28  
Location/Qualifiers  
/organism="Homo sapiens"  
/db\_xref="taxon:9606"  
/clone="IMAGE:2215812"  
/clone\_lib="NCI-CGAP\_cw24"  
/clone\_type="tumor, 5 pooled (see description)"  
/lab\_host="b10b"  
/note="organ: ovary; Vector: pMW-SpB16; Site:1; Salt; Site\_2: Not1; Cloned unidirectionally. Primer: oligo dt. Average insert size 1.45 kb. Tumor types include: mixed Mullerian tumor, papillary serous, clear cell, spindle cell. All are primary tumors, metastasis positive. Life technologies catalog #: 11534-013"

Have considered overall poor quality  
Seq primer: -400P from Gibco  
High quality sequence stop: 1.  
Location/Qualifiers

FEATURES  
Source  
1..28  
Location/Qualifiers

Query Match 57.1%; Score 12; DB 9; Length 28;  
Best Local Similarity 75.0%; Pred. No. 2.2e+05;  
Matches 15; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 2 AGGATAGAGCGCGGT 21  
||||| ||||| |||||  
Db 9 AGGATAGAGCGCGGT 28



Islam, H., Lonsdare, S., Mahmoud, M., Meenen, R., Pedersen, J., Kelly, M., Rose, M., Rose, R., Stokes, R., Finney, A., von Niederhausern, A., and Wright, D., Weiss, R.  
 Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts  
 Unpublished (2004)  
 Contact: Robert B. Weiss  
 University of Utah Genome Center  
 University of Utah  
 Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2000 E., Ste. 01  
 84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: rdunn@genetics.utah.edu  
 Insert Length: 10000 Std Error: 0.00  
 Plate: 0007 row: P column: 16  
 Seq primer: GGTCTAAAGAGAGAGAGAGAG  
 class: plasmid ends  
 High quality sequence stop: 22.  
 Location/Qualifiers  
 1..22  
 /organism="Mus musculus"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="000C200007P16"  
 /clone\_lib="Mouse 10kb plasmid 000C1M library"  
 /sex="Male"  
 /lab\_host="E. coli strain XL10-Gold, II-resistant, F-"  
 /note="Vector: pMD20uv; Purified genomic DNA from M. musculus (C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (<http://www.jax.org/resources/documents/dnares/>). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD2 (q1147321141q147120721), a copy number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

# FEATURES SOURCE

Query Match 56.2%; Score 11.8; DB 17; Length 22;  
 Best Local Similarity 86.7%; Pred. No. 2.6e+05;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 3 CCAATGGTAGAGGACC 17  
 DB 2 CCAATGGTAGAGGACC 16  
 BASE COMP: 3 4 17 c i q 1 1  
 ORIGIN

Query Match 56.2%; Score 11.8; DB 17; Length 22;  
 Best Local Similarity 86.7%; Pred. No. 2.6e+05;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 3 CCAATGGTAGAGGACC 17  
 DB 2 CCAATGGTAGAGGACC 16  
 RESULT 16  
 HSM007777/c  
 ID HSM007777 standard: RNA; EST: 35 BP.  
 XX AC AL044927;  
 XX AL044927;  
 SV AL044927.1  
 DT 12 MAR 1999 (rel. 59, Created)  
 DT 12 MAR 1999 (rel. 59, Last updated, Version 1)  
 XX DE Homo sapiens mRNA; EST DKFZp444N013\_1 (from clone DKFZp444N013)  
 XX KW EST: expressed sequence tag.

XX Homo sapiens (human)  
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 XX [1]  
 RN 1-35  
 RP Wambutt R., Reinert D., Mewes W., Gassenhuber J., Wiemann S.;  
 RA Submitted (12-MAR-1999) to the EMBL/GenBank/DBJ databases.  
 RI MDS, Am Kleinforspit, 18a D-82152 Martinsried, GERMANY  
 RL  
 XX Clone from S. Wiemann. Sequenced by AGWA within the cDNA sequencing consortium of the German Genome Project  
 CC s1 sequence also available.  
 CC This clone is available at the RZPB in Berlin  
 CC Please contact the RZPB: Ressourcenzentrum, Reinertweg 6, 14059 Berlin-Charlottenburg, GERMANY; Email: clone.rzpb.de  
 XX Key Location/Qualifiers  
 FH 1..35  
 FI source  
 FI /db\_xref="taxon:9606"  
 FI /organism="Homo sapiens"  
 FI /clone="DKFZp444N013"  
 FI /clone\_lib="434 (synonym: hres3). Vector pSport1; host DH10B; sites NotI, SalI"  
 FI /dev\_stage="adult"  
 FI /tissue\_type="testis"  
 XX Sequence 45 BP; 2 A; 8 C; 19 G; 4 T; 2 other;  
 SQ  
 Query Match 56.2%; Score 11.8; DB 2; Length 45;  
 Best Local Similarity 86.7%; Pred. No. 2.9e+05;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 3 CCAATGGTAGAGGACC 17  
 DB 17 CCAATGGTAGAGGACC 3  
 RESULT 20  
 AL0689454  
 LOCUS  
 DEFINITION  
 1894+06.X1 NC1:CGAP.D14 Homo sapiens cDNA clone IMAGE:227226.  
 Similar to SW:BAI2\_HUMAN P48634 LARGE PRO-LINE RICH PROTEIN BAI2.  
 mRNA sequence.  
 ACCESSION  
 AL068945.1 GI:4900748  
 VERSION  
 AL068945.1  
 KEYWORDS  
 EST.  
 SOURCE  
 Human.  
 ORGANISM  
 Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCES  
 1 (bases 1 to 47)  
 NC1:CGAP <http://www.ncbi.nlm.nih.gov/ncicgap/>.  
 National Cancer Institute, Cancer Genome Anatomy Project (CGAP).  
 TITLE  
 Tumor gene index  
 JOURNAL  
 Unpublished (1997)  
 COMMENT  
 Contact: Robert Strausberg, Ph.D.  
 Email: rstraus@mail.nih.gov  
 Tissue Procurement: Christopher Mueseluk, M.D., Ph.D., Michael B. Emmert-Buck, M.D., Ph.D.  
 cDNA Library Preparation: Life Technologies, Inc.  
 cDNA Library Arrayed by: Greg Lennon, Ph.D.  
 DNA Sequencing by: Washington University Genome Sequencing Center  
 clone distribution: NC1:CGAP clone distribution information can be found through the L.M.A.G.E. consortium/LLNL at:  
[www-bio.llnl.gov/bbrp/image/image.html](http://www-bio.llnl.gov/bbrp/image/image.html)  
 Trace considered overall poor quality  
 Insert Length: 1211 Std Error: 0.00  
 Seq primer: -340bp from Gibco

High quality sequence stop: 1.  
location/Qualifiers  
1. 37

/organism "Homo Sapiens"  
/db\_xref "taxon:9606"  
/clone "IMAGE:2277226"  
/clone\_lib "NCICALL014"  
/issue\_type "serous papillary carcinoma, high grade, 2  
pooled tumors"  
/lab\_host "DH10B"  
/note "organ: uterus; Vector: pCMV Spout6; Site\_1: SalI;  
Site\_2: NotI; Cloned unidirectionally. Primer: oligo dt.  
Average Insert Size 1.48 kb. Life Technologies catalog #: 11542-016"

BASE COUNT 14 a 17 c 6 g 0 t  
ORIGIN

Query Match 56.2%; Score 11.8; DB 9; Length 47;

Best Local Similarity 86.7%; Pred. No. 2.9e+05;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 CCACAGGAGGAGGAGG 17

||||| 1 11111111

Db 22 CCACAGGAGGAGGAGG 46

RESULT 21

AZ460654/c

LOCUS AZ460654 41 bp DNA linear GSS 04-oct-2000  
DEFINITION IM0266601F Mouse 10kb plasmid U0631M library Mus musculus genomic  
clone U0631M0266601 F, DNA sequence.

ACCESSION AZ460654

VERSION AZ460654.1 GI: 10618779

KEYWORDS GSS.

SOURCE house mouse.

ORGANISM Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.  
1 (bases 1 to 41)

REFERENCE 1 (bases 1 to 41)  
Bunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,R., Hamil,C.,  
Islam,H., Loncaric,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly  
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.  
and Wright,D., Weiss,R.

Mouse whole genome scaffolding with paired end reads from 10kb

plasmid inserts

Unpublished (2000)

Contact: Robert R. Weiss

University of Utah Genome Center

801 408, Biomedical Polymers Research Bldg., 20 S. 2030 E., Ste, 01  
84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunne@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00

Plate: 0266 row: F column: 01

Seq primer: CTTCTTAAAGGAGGACACT

Class: plasmid ends

High quality sequence stop: 41.

location/Qualifiers

1. 41

/organism "Mus musculus"

/strain "c57bl/6J"

/db\_xref "taxon:10090"

/clone "U0631M0266601"

/clone\_lib "Mouse 10kb plasmid U0631M library"

/sex "Male"

/lab\_host "E. coli strain XL10-Gold, T1 resistant, F-"

/note "Vector: pCMV20v; Purified genomic DNA from M.  
musculus (c57bl/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource.

(http://www.jax.org/resources/documents/4nares/). The DNA  
was hydrodynamically sheared by repeated passage through a

0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end repaired with T4 DNA polymerase and T4  
polynucleotide kinase. Adaptor oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adapted DNA was purified and size selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of pMD2 (q14742114-blaAP12902.1), a copy number  
inducible derivative of plasmid R1. The vector was ligated  
with adaptors complementary to the insert adaptors and  
purified. The sheared, adapted mouse DNA was annealed to  
adapted vector DNA, and transformed into  
chemically competent E. coli XL10 Gold (Stratagene) cells  
and selected for ampicillin resistance."

BASE COUNT 5 a 4 c 21 g 11 t

ORIGIN

Query Match 56.2%; Score 11.8; DB 17; Length 41;

Best Local Similarity 86.7%; Pred. No. 3e+09;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 CCACAGGAGGAGGAGG 17

||||| 1 11111111

Db 18 CCACAGGAGGAGGAGG 4

RESULT 22

AZ484427/c

LOCUS AZ484427 42 bp DNA linear GSS 02-oct-2000  
DEFINITION IM0141N02F Mouse 10kb plasmid U0631M library Mus musculus genomic  
clone U0631M0141N02 F, DNA sequence.

ACCESSION AZ484427

VERSION AZ484427.1 GI: 10497127

KEYWORDS GSS.

SOURCE house mouse.

ORGANISM Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.  
1 (bases 1 to 42)

REFERENCE 1 (bases 1 to 42)  
Bunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,R., Hamil,C.,  
Islam,H., Loncaric,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly  
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.  
and Wright,D., Weiss,R.

Mouse whole genome scaffolding with paired end reads from 10kb

plasmid inserts

Unpublished (2000)

Contact: Robert R. Weiss

University of Utah Genome Center

801 408, Biomedical Polymers Research Bldg., 20 S. 2030 E., Ste, 01  
84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunne@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00

Plate: 0141 row: N column: 02

Seq primer: CTTCTTAAAGGAGGACACT

Class: plasmid ends

High quality sequence stop: 42.

location/Qualifiers

1. 42

/organism "Mus musculus"

/strain "c57bl/6J"

/db\_xref "taxon:10090"

/clone "U0631M0141N02"

/clone\_lib "Mouse 10kb plasmid U0631M library"

/sex "Male"

/lab\_host "E. coli strain XL10-Gold, T1 resistant, F-"

/note "Vector: pCMV20v; Purified genomic DNA from M.  
musculus (c57bl/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource.

(http://www.jax.org/resources/documents/4nares/). The DNA  
was hydrodynamically sheared by repeated passage through a



Chen, et al., Tsunoda, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki,  
Y., Nakamura, Y., Suyama, A., and Sugano, S.  
Diverse transcriptional initiation revealed by time, large scale  
mapping of mRNA start sites.  
EMBO Rep. 2 (5), 488-493 (2001)  
21270072  
MEDLINE  
COMMENT  
Contact: Yutaka Suzuki  
Department of Virology  
Institute of Medical Science, University of Tokyo  
4-6-1, Shirokanedai, Minatoku, Tokyo 108 8649, Japan  
Email: ysuzuki@ims.u-tokyo.ac.jp  
Suzuki, Y., Yoshitomo Nakagawa, K., Maruyama, K., Suyama, A., and Sugano,  
S. Construction and characterization of a full length enriched and  
a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

# FEATURES

## SOURCE

1..50  
Organism "Homo sapiens"  
Zdb\_xref "taxon:9606"  
Zclone "KAT08494"  
Zclone\_lib "Sudano Homo sapiens cDNA library"  
Znote "Differential display comparison of untreated and  
dimethylamylate treated B947 cells"

## BASE COUNT ORIGIN

7 a 13 c 21 g 9 t  
Query Match 56.28; Score 11.8; DB 9; Length 50;  
Best local similarity 86.78; Pred. No. 3,1e+05;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 CCAAGGAGGAGGAG 18  
11111111111111111111  
1b 38 CCAAGGAGGAGGAG 24

Search completed: March 18, 2003, 12:08:04  
Job time : 872.984 secs

OM nucleic nucleic search, using sw model  
 Run on: March 18, 2003, 10:48:56 ; Search time 110.82 Seconds  
 (without alignments)  
 406.426 Million cell updates/sec  
 Title: US-09-900-115-5  
 Perfect score: 20  
 Sequence: 1 gcacagattctctccgaag 20  
 Scoring table: IDENTITY: NUC  
 Gap: 10.0, gapext 1.0  
 Searched: 2085249 seqs, 112599459 residues  
 Total number of hits satisfying chosen parameters: 2166140  
 Minimum hit seq length: 0  
 Maximum hit seq length: 50  
 Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 1000 summaries  
 Database : N\_Genoseq\_101002: \*  
 1: /SID52/qcdata/geneseq/geneseq-emb1/NA1980.DAT: \*  
 2: /SID52/qcdata/geneseq/geneseq-emb1/NA1981.DAT: \*  
 3: /SID52/qcdata/geneseq/geneseq-emb1/NA1982.DAT: \*  
 4: /SID52/qcdata/geneseq/geneseq-emb1/NA1983.DAT: \*  
 5: /SID52/qcdata/geneseq/geneseq-emb1/NA1984.DAT: \*  
 6: /SID52/qcdata/geneseq/geneseq-emb1/NA1985.DAT: \*  
 7: /SID52/qcdata/geneseq/geneseq-emb1/NA1986.DAT: \*  
 8: /SID52/qcdata/geneseq/geneseq-emb1/NA1987.DAT: \*  
 9: /SID52/qcdata/geneseq/geneseq-emb1/NA1988.DAT: \*  
 10: /SID52/qcdata/geneseq/geneseq-emb1/NA1989.DAT: \*  
 11: /SID52/qcdata/geneseq/geneseq-emb1/NA1990.DAT: \*  
 12: /SID52/qcdata/geneseq/geneseq-emb1/NA1991.DAT: \*  
 13: /SID52/qcdata/geneseq/geneseq-emb1/NA1992.DAT: \*  
 14: /SID52/qcdata/geneseq/geneseq-emb1/NA1993.DAT: \*  
 15: /SID52/qcdata/geneseq/geneseq-emb1/NA1994.DAT: \*  
 16: /SID52/qcdata/geneseq/geneseq-emb1/NA1995.DAT: \*  
 17: /SID52/qcdata/geneseq/geneseq-emb1/NA1996.DAT: \*  
 18: /SID52/qcdata/geneseq/geneseq-emb1/NA1997.DAT: \*  
 19: /SID52/qcdata/geneseq/geneseq-emb1/NA1998.DAT: \*  
 20: /SID52/qcdata/geneseq/geneseq-emb1/NA1999.DAT: \*  
 21: /SID52/qcdata/geneseq/geneseq-emb1/NA2000.DAT: \*  
 22: /SID52/qcdata/geneseq/geneseq-emb1/NA2001A.DAT: \*  
 23: /SID52/qcdata/geneseq/geneseq-emb1/NA2001B.DAT: \*  
 24: /SID52/qcdata/geneseq/geneseq-emb1/NA2002.DAT: \*

Pred. No. is the number of results predicted by chance to have a  
 score greater than or equal to the score of the result being printed,  
 and is derived by analysis of the total score distribution.

| SUMMARIES  |       |                    |                |
|--|-------|--------------------|----------------|
| Result No.   | Score | Query Match length | Description    |
| 1  | 20    | 100.0              | 20 24 AAD3355  |
| 2  | 15.8  | 79.0               | 23 20 AAZ28750 |
| 3  | 15.8  | 79.0               | 27 20 AAZ28751 |
| 4  | 15.8  | 79.0               | 30 20 AAZ28752 |
| 5  | 15.8  | 79.0               | 33 20 AAZ28753 |
| 6  | 15.8  | 79.0               | 34 20 AAZ28749 |
| 7  | 15.8  | 79.0               | 39 20 AAZ19814 |
| 8  | 15.8  | 79.0               | 39 20 AAZ07779 |
| 9  | 15.8  | 79.0               | 43 24 ABR11804 |
| tGF-beta1 splice j<br>Truncated membrane<br>Truncated membrane<br>Truncated membrane<br>Membrane-transloc<br>Membrane transloc<br>DNA encoding synth |       |                    |                |

|          |    |    |      |      |    |    |
|----------|----|----|------|------|----|----|
| AAZ19812 | 46 | 20 | 79.0 | 15.8 | 10 | 10 |
| AAZ20778 | 46 | 20 | 79.0 | 15.8 | 11 | 11 |
| AAAG6108 | 23 | 24 | 72.0 | 15.4 | 12 | 12 |
| ABK1065  | 23 | 24 | 72.0 | 15.4 | 13 | 13 |
| AAO12479 | 20 | 22 | 69.0 | 14.8 | 14 | 14 |
| AAV0932  | 21 | 19 | 69.0 | 14.8 | 15 | 15 |
| AAV0942  | 21 | 19 | 69.0 | 14.8 | 16 | 16 |
| AAZ50970 | 30 | 21 | 68.0 | 14.6 | 17 | 17 |
| ABK71876 | 21 | 24 | 67.0 | 14.4 | 18 | 18 |
| AAI94679 | 33 | 18 | 67.0 | 14.4 | 19 | 19 |
| ABK71874 | 33 | 24 | 67.0 | 14.4 | 20 | 20 |
| ABK71874 | 36 | 24 | 67.0 | 14.4 | 21 | 21 |
| ABK71875 | 39 | 24 | 67.0 | 14.4 | 22 | 22 |
| AAA48438 | 19 | 21 | 66.0 | 14.2 | 23 | 23 |
| AAH60000 | 19 | 22 | 66.0 | 14.2 | 24 | 24 |
| AAZ76126 | 21 | 21 | 66.0 | 14.2 | 25 | 25 |
| AAZ55724 | 24 | 21 | 66.0 | 14.2 | 26 | 26 |
| AAQ34108 | 38 | 13 | 66.0 | 14.2 | 27 | 27 |
| AAI44876 | 39 | 17 | 66.0 | 14.2 | 28 | 28 |
| AAI05485 | 17 | 21 | 64.0 | 12.8 | 29 | 29 |
| AAQ48643 | 20 | 14 | 64.0 | 12.8 | 30 | 30 |
| AAQ48645 | 20 | 14 | 64.0 | 12.8 | 31 | 31 |
| AAI29954 | 31 | 22 | 64.0 | 12.8 | 32 | 32 |
| AAZ28757 | 33 | 20 | 64.0 | 12.8 | 33 | 33 |
| AAQ31547 | 39 | 13 | 64.0 | 12.8 | 34 | 34 |
| AAI06741 | 39 | 17 | 64.0 | 12.8 | 35 | 35 |
| AAI16725 | 45 | 22 | 64.0 | 12.8 | 36 | 36 |
| AAI30074 | 45 | 22 | 64.0 | 12.8 | 37 | 37 |
| ABK40308 | 45 | 24 | 64.0 | 12.8 | 38 | 38 |
| AAZ76342 | 19 | 21 | 64.0 | 12.6 | 39 | 39 |
| ABH95963 | 20 | 24 | 64.0 | 12.6 | 40 | 40 |
| ABH88496 | 24 | 24 | 64.0 | 12.6 | 41 | 41 |
| ABH8497  | 24 | 24 | 64.0 | 12.6 | 42 | 42 |
| AAV26315 | 25 | 19 | 64.0 | 12.6 | 43 | 43 |
| AAZ26054 | 25 | 20 | 64.0 | 12.6 | 44 | 44 |
| AAZ7539  | 25 | 21 | 64.0 | 12.6 | 45 | 45 |
| AAZ03758 | 25 | 22 | 64.0 | 12.6 | 46 | 46 |
| AAV22968 | 26 | 19 | 64.0 | 12.6 | 47 | 47 |
| AAV06642 | 26 | 20 | 64.0 | 12.6 | 48 | 48 |
| AAV31032 | 27 | 19 | 64.0 | 12.6 | 49 | 49 |
| AAV05759 | 28 | 19 | 64.0 | 12.6 | 50 | 50 |
| ABH95970 | 31 | 24 | 64.0 | 12.6 | 51 | 51 |
| ABH83725 | 35 | 24 | 64.0 | 12.6 | 52 | 52 |
| ABH85655 | 42 | 18 | 64.0 | 12.6 | 53 | 53 |
| AAZ33944 | 45 | 20 | 64.0 | 12.6 | 54 | 54 |
| AAZ78631 | 45 | 21 | 64.0 | 12.6 | 55 | 55 |
| AAZ01153 | 47 | 20 | 64.0 | 12.6 | 56 | 56 |
| AAZ67358 | 47 | 21 | 64.0 | 12.6 | 57 | 57 |
| AAH0517  | 49 | 18 | 64.0 | 12.6 | 58 | 58 |
| ABG01607 | 24 | 24 | 62.0 | 12.4 | 59 | 59 |
| ABG07132 | 24 | 24 | 62.0 | 12.4 | 60 | 60 |
| ABG07173 | 24 | 24 | 62.0 | 12.4 | 61 | 61 |
| AAV94091 | 27 | 19 | 62.0 | 12.4 | 62 | 62 |
| AAZ09143 | 37 | 20 | 62.0 | 12.4 | 63 | 63 |
| AAI1046  | 34 | 17 | 62.0 | 12.4 | 64 | 64 |
| AAH86106 | 37 | 20 | 62.0 | 12.4 | 65 | 65 |
| ABG73279 | 41 | 24 | 62.0 | 12.4 | 66 | 66 |
| AAH07146 | 17 | 21 | 61.0 | 12.2 | 67 | 67 |
| AAH84839 | 19 | 21 | 61.0 | 12.2 | 68 | 68 |
| AAH60001 | 19 | 22 | 61.0 | 12.2 | 69 | 69 |
| AAZ76367 | 20 | 15 | 61.0 | 12.2 | 70 | 70 |
| AAI15164 | 20 | 16 | 61.0 | 12.2 | 71 | 71 |
| AAI40415 | 20 | 24 | 61.0 | 12.2 | 72 | 72 |
| ABK51941 | 21 | 24 | 61.0 | 12.2 | 73 | 73 |
| AAI59269 | 25 | 23 | 61.0 | 12.2 | 74 | 74 |
| AAH98286 | 27 | 21 | 61.0 | 12.2 | 75 | 75 |
| AAH04274 | 29 | 21 | 61.0 | 12.2 | 76 | 76 |
| AAH40143 | 31 | 19 | 61.0 | 12.2 | 77 | 77 |





|       |      |      |    |    |          |                   |
|-------|------|------|----|----|----------|-------------------|
| c 229 | 11.6 | 58.0 | 41 | 24 | ABQ61549 | Human aquaporin 5 |
| c 230 | 11.6 | 58.0 | 41 | 24 | ABQ61549 | Human aquaporin 5 |
| c 231 | 11.6 | 58.0 | 41 | 24 | AAV49840 | Wheat D1 protease |
| c 232 | 11.6 | 58.0 | 42 | 18 | AAV49840 | Wheat D1 protease |
| c 233 | 11.6 | 58.0 | 44 | 21 | AAV49840 | Wheat D1 protease |
| c 234 | 11.6 | 58.0 | 45 | 22 | AAV49840 | Wheat D1 protease |
| c 235 | 11.6 | 58.0 | 45 | 22 | AAV49840 | Wheat D1 protease |
| c 236 | 11.6 | 58.0 | 45 | 24 | AAV49840 | Wheat D1 protease |
| c 237 | 11.6 | 58.0 | 47 | 21 | AAV49840 | Wheat D1 protease |
| c 238 | 11.6 | 58.0 | 47 | 21 | AAV49840 | Wheat D1 protease |
| c 239 | 11.6 | 58.0 | 48 | 22 | AAV49840 | Wheat D1 protease |
| c 240 | 11.6 | 58.0 | 50 | 13 | AAV49840 | Wheat D1 protease |
| c 241 | 11.6 | 58.0 | 50 | 20 | AAV49840 | Wheat D1 protease |
| c 242 | 11.6 | 58.0 | 50 | 21 | AAV49840 | Wheat D1 protease |
| c 243 | 11.6 | 58.0 | 50 | 21 | AAV49840 | Wheat D1 protease |
| c 244 | 11.6 | 58.0 | 50 | 21 | AAV49840 | Wheat D1 protease |
| c 245 | 11.6 | 58.0 | 50 | 22 | AAV49840 | Wheat D1 protease |
| c 246 | 11.4 | 57.0 | 17 | 21 | AAV49840 | Wheat D1 protease |
| c 247 | 11.4 | 57.0 | 17 | 24 | AAV49840 | Wheat D1 protease |
| c 248 | 11.4 | 57.0 | 18 | 15 | AAV49840 | Wheat D1 protease |
| c 249 | 11.4 | 57.0 | 18 | 20 | AAV49840 | Wheat D1 protease |
| c 250 | 11.4 | 57.0 | 18 | 20 | AAV49840 | Wheat D1 protease |
| c 251 | 11.4 | 57.0 | 19 | 21 | AAV49840 | Wheat D1 protease |
| c 252 | 11.4 | 57.0 | 19 | 21 | AAV49840 | Wheat D1 protease |
| c 253 | 11.4 | 57.0 | 19 | 22 | AAV49840 | Wheat D1 protease |
| c 254 | 11.4 | 57.0 | 19 | 22 | AAV49840 | Wheat D1 protease |
| c 255 | 11.4 | 57.0 | 20 | 17 | AAV49840 | Wheat D1 protease |
| c 256 | 11.4 | 57.0 | 20 | 20 | AAV49840 | Wheat D1 protease |
| c 257 | 11.4 | 57.0 | 20 | 20 | AAV49840 | Wheat D1 protease |
| c 258 | 11.4 | 57.0 | 20 | 21 | AAV49840 | Wheat D1 protease |
| c 259 | 11.4 | 57.0 | 20 | 24 | AAV49840 | Wheat D1 protease |
| c 260 | 11.4 | 57.0 | 21 | 19 | AAV49840 | Wheat D1 protease |
| c 261 | 11.4 | 57.0 | 21 | 20 | AAV49840 | Wheat D1 protease |
| c 262 | 11.4 | 57.0 | 22 | 19 | AAV49840 | Wheat D1 protease |
| c 263 | 11.4 | 57.0 | 22 | 20 | AAV49840 | Wheat D1 protease |
| c 264 | 11.4 | 57.0 | 22 | 21 | AAV49840 | Wheat D1 protease |
| c 265 | 11.4 | 57.0 | 23 | 24 | AAV49840 | Wheat D1 protease |
| c 266 | 11.4 | 57.0 | 24 | 19 | AAV49840 | Wheat D1 protease |
| c 267 | 11.4 | 57.0 | 24 | 19 | AAV49840 | Wheat D1 protease |
| c 268 | 11.4 | 57.0 | 24 | 20 | AAV49840 | Wheat D1 protease |
| c 269 | 11.4 | 57.0 | 24 | 21 | AAV49840 | Wheat D1 protease |
| c 270 | 11.4 | 57.0 | 24 | 24 | AAV49840 | Wheat D1 protease |
| c 271 | 11.4 | 57.0 | 24 | 24 | AAV49840 | Wheat D1 protease |
| c 272 | 11.4 | 57.0 | 24 | 24 | AAV49840 | Wheat D1 protease |
| c 273 | 11.4 | 57.0 | 24 | 24 | AAV49840 | Wheat D1 protease |
| c 274 | 11.4 | 57.0 | 25 | 14 | AAV49840 | Wheat D1 protease |
| c 275 | 11.4 | 57.0 | 25 | 19 | AAV49840 | Wheat D1 protease |
| c 276 | 11.4 | 57.0 | 25 | 20 | AAV49840 | Wheat D1 protease |
| c 277 | 11.4 | 57.0 | 25 | 21 | AAV49840 | Wheat D1 protease |
| c 278 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 279 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 280 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 281 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 282 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 283 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 284 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 285 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 286 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 287 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 288 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 289 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 290 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 291 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 292 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 293 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 294 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 295 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 296 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 297 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 298 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 299 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 300 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |
| c 301 | 11.4 | 57.0 | 25 | 24 | AAV49840 | Wheat D1 protease |



|       |    |      |    |    |           |                     |       |      |      |    |    |           |                      |
|-------|----|------|----|----|-----------|---------------------|-------|------|------|----|----|-----------|----------------------|
| c 521 | 11 | 55.0 | 21 | 24 | ARK70349  | Synthetic antisense | c 594 | 11   | 55.0 | 35 | 19 | AAV22971  | PCR primer A-L Pr    |
| c 522 | 11 | 55.0 | 22 | 21 | AAA39405  | Sindai virus struc  | c 595 | 11   | 55.0 | 35 | 20 | AAV22451  | Human cPRM1 DNA ex   |
| c 523 | 11 | 55.0 | 24 | 19 | AAV58462  | Primer ORKAS432.1   | c 596 | 11   | 55.0 | 35 | 20 | AAV70645  | PCR primer A-L2 Pr   |
| c 524 | 11 | 55.0 | 24 | 20 | AAV60947  | Hepatitis C virus   | c 597 | 11   | 55.0 | 36 | 21 | AAZ96548  | T cell antigen rec   |
| c 525 | 11 | 55.0 | 24 | 24 | AHL99487  | Right PCR primer u  | c 598 | 11   | 55.0 | 37 | 22 | AA505664  | Rat NAM hybridisa    |
| c 526 | 11 | 55.0 | 24 | 24 | ARK65974  | Human gene specifi  | c 599 | 11   | 55.0 | 38 | 16 | AAO81544  | Primer for adeno v   |
| c 527 | 11 | 55.0 | 24 | 24 | ARK03946  | Oligonucleotide ad  | c 600 | 11   | 55.0 | 38 | 20 | AAV64310  | Human TCR beta cha   |
| c 528 | 11 | 55.0 | 25 | 15 | AAO67080  | Sense primer for a  | c 601 | 11   | 55.0 | 39 | 13 | AAQ27408  | Encoades VbJ seque   |
| c 529 | 11 | 55.0 | 25 | 16 | AAO98275  | Hepatitis C virus   | c 602 | 11   | 55.0 | 39 | 17 | AAAT70762 | Stomatoc carotid a   |
| c 530 | 11 | 55.0 | 25 | 18 | AAU77077  | Hepatitis C virus   | c 603 | 11   | 55.0 | 39 | 17 | AAAT32398 | PCR primer for net   |
| c 531 | 11 | 55.0 | 25 | 20 | AAV80347  | Green fluorescent   | c 604 | 11   | 55.0 | 39 | 18 | AAV59294  | Sindbis virus glye   |
| c 532 | 11 | 55.0 | 25 | 21 | AAV96960  | PCR primer used to  | c 605 | 11   | 55.0 | 39 | 18 | AAAT77351 | Antisense primer f   |
| c 533 | 11 | 55.0 | 25 | 21 | AAZ99212  | Primer for primer-  | c 606 | 11   | 55.0 | 39 | 18 | AAAT85563 | HIV-1 LAI test gene  |
| c 534 | 11 | 55.0 | 25 | 22 | AAU14946  | Oligo #17 for muta  | c 607 | 11   | 55.0 | 39 | 20 | AAV58543  | Sindbis virus glye   |
| c 535 | 11 | 55.0 | 25 | 22 | AAU14948  | Oligo #19 for muta  | c 608 | 11   | 55.0 | 39 | 20 | AAV15248  | Probe used for det   |
| c 536 | 11 | 55.0 | 25 | 22 | AAU14950  | Oligo #21 for muta  | c 609 | 11   | 55.0 | 39 | 21 | AAV51672  | Primer SINGIE for    |
| c 537 | 11 | 55.0 | 26 | 18 | AAV84698  | KSHV/enf2 glycopro  | c 610 | 11   | 55.0 | 39 | 22 | AAV85266  | DNA encoding VbJ j   |
| c 538 | 11 | 55.0 | 26 | 24 | AHR86196  | Mms16 DNA amplifi   | c 611 | 11   | 55.0 | 39 | 22 | AAV27171  | Human re cell line   |
| c 539 | 11 | 55.0 | 26 | 24 | ARK71948  | Human RT-PCR probe  | c 612 | 11   | 55.0 | 40 | 20 | AAV08604  | Assembly oligonuc    |
| c 540 | 11 | 55.0 | 26 | 24 | ARK39912  | Human Retinolic aci | c 613 | 11   | 55.0 | 40 | 20 | AAV08605  | Assembly oligonuc    |
| c 541 | 11 | 55.0 | 27 | 20 | AAV36244  | Primer used for se  | c 614 | 11   | 55.0 | 40 | 20 | AAV01614  | Helix-turn-helix d   |
| c 542 | 11 | 55.0 | 27 | 22 | AAV86100  | 5' primer RC948 to  | c 615 | 11   | 55.0 | 40 | 20 | AAV01615  | Helix-turn-helix d   |
| c 543 | 11 | 55.0 | 27 | 24 | AAU38890  | AltaIa plasmidocyan | c 616 | 11   | 55.0 | 40 | 24 | AAV59536  | Primer #54 used in   |
| c 544 | 11 | 55.0 | 27 | 24 | ABN83666  | Glutathione synth   | c 617 | 11   | 55.0 | 41 | 14 | AAQ41170  | Deleterative primer  |
| c 545 | 11 | 55.0 | 27 | 24 | AAV96548  | Primer #56 used in  | c 618 | 11   | 55.0 | 41 | 15 | AAQ44336  | GAT-B transporter    |
| c 546 | 11 | 55.0 | 28 | 16 | AAV05249  | Hepatitis C virus   | c 619 | 11   | 55.0 | 41 | 24 | AAV43163  | Human polyphosphin   |
| c 547 | 11 | 55.0 | 28 | 21 | AAZ57748  | Hepatitis C virus   | c 620 | 11   | 55.0 | 41 | 24 | ABK59206  | RNA polymerase II    |
| c 548 | 11 | 55.0 | 28 | 21 | AAZ57779  | Hepatitis C virus   | c 621 | 11   | 55.0 | 42 | 14 | AAV50769  | ERM HIV target seq   |
| c 549 | 11 | 55.0 | 28 | 22 | AHV91275  | Hepatitis C virus   | c 622 | 11   | 55.0 | 42 | 16 | AAV83141  | HIVCRV12 No. 2065    |
| c 550 | 11 | 55.0 | 28 | 22 | AAH73507  | Human GPRV12 PCR p  | c 623 | 11   | 55.0 | 42 | 20 | AAV59076  | MOB7 PCR primer v4   |
| c 551 | 11 | 55.0 | 29 | 20 | AAV92417  | Human A-Rat hamster | c 624 | 11   | 55.0 | 42 | 20 | AAV27476  | Oligo 925 for hcs    |
| c 552 | 11 | 55.0 | 29 | 21 | AAU04494  | Polymorphic fragme  | c 625 | 11   | 55.0 | 42 | 21 | AAV96505  | T cell antigen rec   |
| c 553 | 11 | 55.0 | 29 | 24 | ARK47068  | Mouse OTS1-B7 reve  | c 626 | 11   | 55.0 | 42 | 21 | AAZ96506  | T cell antigen rec   |
| c 554 | 11 | 55.0 | 29 | 24 | ARK47157  | Mouse OTS1-B7 gene  | c 627 | 11   | 55.0 | 42 | 21 | AAZ66451  | Halpin fibrocyte c   |
| c 555 | 11 | 55.0 | 30 | 22 | AAV43559  | Corneodesmosin PCR  | c 628 | 11   | 55.0 | 44 | 18 | AAV26226  | Bovine beta-mannos   |
| c 556 | 11 | 55.0 | 30 | 24 | ARK26242  | HIV-1 gene fragmen  | c 629 | 11   | 55.0 | 44 | 20 | AAV64123  | Hepatitis C virus    |
| c 557 | 11 | 55.0 | 30 | 24 | ARK60604  | Human leukemia ch   | c 630 | 11   | 55.0 | 45 | 17 | AAV09176  | Capture/Amp-probe    |
| c 558 | 11 | 55.0 | 30 | 24 | ARK14780  | Human protein disu  | c 631 | 11   | 55.0 | 45 | 19 | AAV22769  | Hepatitis C virus    |
| c 559 | 11 | 55.0 | 31 | 21 | AAV79158  | Human genomic DNA   | c 632 | 11   | 55.0 | 45 | 19 | AAV20717  | Hepatitis C virus    |
| c 560 | 11 | 55.0 | 32 | 17 | AAV11245  | HIV strain lai net  | c 633 | 11   | 55.0 | 45 | 19 | AAV05026  | Probe PA of the sp   |
| c 561 | 11 | 55.0 | 32 | 19 | AAV64347  | TrnR2 cDNA PCR pri  | c 634 | 11   | 55.0 | 45 | 20 | AAZ34189  | Human PR827 hybr1    |
| c 562 | 11 | 55.0 | 32 | 22 | AAV99675  | Probe used to iden  | c 635 | 11   | 55.0 | 45 | 21 | AAZ78809  | T cell antigen rec   |
| c 563 | 11 | 55.0 | 33 | 17 | AAV15816  | Humanised IL2 MAB   | c 636 | 11   | 55.0 | 45 | 21 | AAZ96533  | T cell antigen rec   |
| c 564 | 11 | 55.0 | 33 | 18 | AAV188139 | Primer for variabl  | c 637 | 11   | 55.0 | 45 | 21 | AAZ96583  | T cell antigen rec   |
| c 565 | 11 | 55.0 | 33 | 18 | AAV65470  | pCMVdeltaR8 consti  | c 638 | 11   | 55.0 | 45 | 21 | AAZ96607  | T cell antigen rec   |
| c 566 | 11 | 55.0 | 33 | 19 | AAV48475  | Human CC chemokine  | c 639 | 11   | 55.0 | 45 | 24 | ABK86838  | Hepatitis C A viru   |
| c 567 | 11 | 55.0 | 33 | 20 | AAZ23103  | HIV-1 tat, rev and  | c 640 | 11   | 55.0 | 46 | 20 | AAV78262  | TAT-HV-p15b1d fusi   |
| c 568 | 11 | 55.0 | 33 | 21 | AAV51666  | Primer NEIR for SI  | c 641 | 11   | 55.0 | 46 | 21 | AAV38484  | Mouse htd p5 domai   |
| c 569 | 11 | 55.0 | 33 | 22 | AAV75451  | Human zinc finger   | c 642 | 11   | 55.0 | 46 | 21 | AAA46602  | PCR primer used to   |
| c 570 | 11 | 55.0 | 33 | 22 | AAV73921  | Human PD2 protein   | c 643 | 11   | 55.0 | 46 | 21 | AAV05885  | Group B Streptococ   |
| c 571 | 11 | 55.0 | 33 | 22 | AAV89690  | Probe used to iden  | c 644 | 11   | 55.0 | 46 | 22 | AAV07152  | Unique cloning sit   |
| c 572 | 11 | 55.0 | 33 | 24 | AAV50204  | RNA polymerase II   | c 645 | 11   | 55.0 | 47 | 20 | AAV01076  | Probe for human f6   |
| c 573 | 11 | 55.0 | 34 | 16 | AAV86201  | Sindbis structural  | c 646 | 11   | 55.0 | 47 | 21 | AAZ65763  | Human map-related    |
| c 574 | 11 | 55.0 | 34 | 17 | AAV35093  | Sindbis virus stru  | c 647 | 11   | 55.0 | 47 | 21 | AAZ66195  | Human map-related    |
| c 575 | 11 | 55.0 | 34 | 17 | AAV40848  | Sindbis cDNA rever  | c 648 | 11   | 55.0 | 47 | 21 | AAZ67889  | Human map-related    |
| c 576 | 11 | 55.0 | 34 | 19 | AAV00182  | Reverse primer 114  | c 649 | 11   | 55.0 | 47 | 21 | AAZ67897  | Human map-related    |
| c 577 | 11 | 55.0 | 34 | 19 | AAV42423  | Reverse PCR primer  | c 650 | 11   | 55.0 | 47 | 24 | AAZ24592  | 3' PCR primer 244    |
| c 578 | 11 | 55.0 | 34 | 20 | AAV70743  | Reverse PCR primer  | c 651 | 11   | 55.0 | 48 | 21 | AAZ96549  | T cell antigen rec   |
| c 579 | 11 | 55.0 | 34 | 21 | AAZ42848  | Sindbis virus stru  | c 652 | 11   | 55.0 | 48 | 21 | AAZ96617  | T cell antigen rec   |
| c 580 | 11 | 55.0 | 34 | 21 | AAZ29655  | Sindbis virus stru  | c 653 | 11   | 55.0 | 48 | 21 | AAZ96645  | T cell antigen rec   |
| c 581 | 11 | 55.0 | 34 | 22 | AAV46245  | Human sperm protei  | c 654 | 11   | 55.0 | 48 | 21 | AAZ96645  | T cell antigen rec   |
| c 582 | 11 | 55.0 | 34 | 22 | AAV49705  | Human FEP utilisin  | c 655 | 11   | 55.0 | 49 | 17 | AAV33251  | PM1-RAV-alpha fusi   |
| c 583 | 11 | 55.0 | 34 | 22 | AAV16419  | Cytochrome c oxida  | c 656 | 11   | 55.0 | 49 | 43 | ABV51687  | Human alphaHba fusi  |
| c 584 | 11 | 55.0 | 34 | 24 | AAV48845  | Alphavirus related  | c 657 | 11   | 55.0 | 49 | 23 | AAV10719  | LAI adapt of oligo   |
| c 585 | 11 | 55.0 | 34 | 24 | ARK46311  | Sindbis virus stru  | c 658 | 11   | 55.0 | 50 | 21 | AAV38651  | Human IME1/alpha BA  |
| c 586 | 11 | 55.0 | 35 | 13 | AAV25544  | 5' PCR primer for   | c 659 | 11   | 55.0 | 50 | 22 | AAV28500  | Human SNP oligonuc   |
| c 587 | 11 | 55.0 | 35 | 13 | AAV25552  | 3' PCR primer for   | c 660 | 11   | 55.0 | 50 | 22 | AAV29963  | Human SNP oligonuc   |
| c 588 | 11 | 55.0 | 35 | 13 | AAV40645  | Primer 672, Synth   | c 661 | 11   | 55.0 | 50 | 22 | AAV33898  | Human SNP oligonuc   |
| c 589 | 11 | 55.0 | 35 | 14 | AAV52457  | PECV and FIPV DF2   | c 662 | 11   | 55.0 | 50 | 22 | AAV34524  | Human SNP oligonuc   |
| c 590 | 11 | 55.0 | 35 | 14 | AAV52455  | PECV and FIPV DF2   | c 663 | 11   | 55.0 | 50 | 22 | AAV43513  | Corneodesmosin sin   |
| c 591 | 11 | 55.0 | 35 | 15 | AAV62894  | GGF primer 672 (pe  | c 664 | 10.8 | 54.0 | 15 | 21 | AAV264410 | Substrate for ham    |
| c 592 | 11 | 55.0 | 35 | 15 | AAV58180  | GGF primer 672 (pe  | c 665 | 10.8 | 54.0 | 17 | 16 | AAV53444  | Rat T-AM hamster hea |
| c 593 | 11 | 55.0 | 35 | 16 | AAV74863  | Bovine glial cell   | c 666 | 10.8 | 54.0 | 17 | 21 | AAV05487  | Hamster head fibrocy |



|       |      |      |    |    |           |                        |       |      |      |    |    |          |                      |
|-------|------|------|----|----|-----------|------------------------|-------|------|------|----|----|----------|----------------------|
| c 814 | 10.6 | 53.0 | 17 | 18 | AA163594  | U46, PCR primer us     | 886   | 10.6 | 53.0 | 41 | 19 | AAV64658 | Seq ID 23 from Ref 1 |
| c 814 | 10.6 | 53.0 | 17 | 21 | AAV60681  | Hammerhead ribozyme    | c 887 | 10.6 | 53.0 | 41 | 19 | AAV67555 | Nucleotide 14 to 16  |
| c 815 | 10.6 | 53.0 | 18 | 19 | AAV62484  | MAP kinase RNA amp     | c 888 | 10.6 | 53.0 | 41 | 21 | AAA78700 | Human genomic DNA    |
| c 816 | 10.6 | 53.0 | 18 | 21 | AAA92591  | Antisense oligonucleo- | c 889 | 10.6 | 53.0 | 41 | 21 | AAA78708 | Human genomic DNA    |
| c 817 | 10.6 | 53.0 | 18 | 24 | AA171420  | Human mannose-6-phos-  | c 890 | 10.6 | 53.0 | 41 | 22 | AA170824 | Human single nucle-  |
| c 818 | 10.6 | 53.0 | 19 | 24 | AB141869  | Human CYP2E1 probe     | c 891 | 10.6 | 53.0 | 42 | 22 | AA171348 | Murine splenocyte    |
| c 819 | 10.6 | 53.0 | 19 | 24 | AB144591  | Human chromosome 1     | c 892 | 10.6 | 53.0 | 43 | 21 | AAA38748 | Murine terminal de   |
| c 820 | 10.6 | 53.0 | 20 | 19 | AA271986  | Hepatocyte nuclear     | c 893 | 10.6 | 53.0 | 43 | 22 | AA300642 | DNA encoding human   |
| c 821 | 10.6 | 53.0 | 20 | 21 | AA271986  | Human biallelic ma     | c 894 | 10.6 | 53.0 | 43 | 22 | AA300649 | DNA encoding human   |
| c 822 | 10.6 | 53.0 | 20 | 22 | AAK95002  | Human cDNA clone-s     | c 895 | 10.6 | 53.0 | 43 | 22 | AA594324 | Aspergillus sojae    |
| c 823 | 10.6 | 53.0 | 20 | 22 | AAK95002  | Shrimp white spot      | c 896 | 10.6 | 53.0 | 43 | 24 | ABK53055 | Air bubble protein   |
| c 824 | 10.6 | 53.0 | 20 | 24 | AB160833  | Nucleotide sequenc     | c 897 | 10.6 | 53.0 | 33 | 24 | AB141579 | Primer #4 related    |
| c 825 | 10.6 | 53.0 | 20 | 24 | ABK59610  | Canine epididymis-     | c 898 | 10.6 | 53.0 | 33 | 24 | AA142065 | Novel murine zinc    |
| c 826 | 10.6 | 53.0 | 20 | 24 | AB194032  | Capture oligonucleo    | c 899 | 10.6 | 53.0 | 44 | 17 | AA113001 | Nitrate reductase    |
| c 827 | 10.6 | 53.0 | 20 | 24 | AB144864  | Human chromosome 1     | c 900 | 10.6 | 53.0 | 44 | 20 | AA306694 | Human cyclin b2 ge   |
| c 828 | 10.6 | 53.0 | 21 | 15 | AA054319  | Neuronal primer to     | c 901 | 10.6 | 53.0 | 44 | 21 | AAZ44155 | PCR primer for c     |
| c 829 | 10.6 | 53.0 | 21 | 17 | AA137544  | Eggs of Barr virus     | c 902 | 10.6 | 53.0 | 44 | 22 | AA445566 | HBV beaon probe      |
| c 830 | 10.6 | 53.0 | 21 | 21 | AA236080  | Reverse PCR primer     | c 903 | 10.6 | 53.0 | 35 | 20 | AAZ27585 | Transcriptional co   |
| c 831 | 10.6 | 53.0 | 21 | 22 | AA515133  | Human NAT2 polymor     | c 904 | 10.6 | 53.0 | 35 | 21 | AAZ54672 | Neisseria Species    |
| c 832 | 10.6 | 53.0 | 21 | 22 | AA971439  | Human gene single      | c 905 | 10.6 | 53.0 | 35 | 22 | AAH91599 | Human inflammatory   |
| c 833 | 10.6 | 53.0 | 22 | 13 | AAQ34432  | Lowstring PCR pri      | c 906 | 10.6 | 53.0 | 35 | 24 | ABK92530 | Leucine zipper hom   |
| c 834 | 10.6 | 53.0 | 22 | 19 | AAH45687  | Human NKCC2 gene c     | c 907 | 10.6 | 53.0 | 36 | 15 | AAQ63278 | Primer to amplify    |
| c 835 | 10.6 | 53.0 | 22 | 21 | AAA49281  | Primer used in REL     | c 908 | 10.6 | 53.0 | 36 | 16 | AAQ82724 | Reverse strand pri   |
| c 836 | 10.6 | 53.0 | 22 | 22 | AA502985  | Human CBM31 forward    | c 909 | 10.6 | 53.0 | 36 | 22 | AA500631 | DNA encoding human   |
| c 837 | 10.6 | 53.0 | 23 | 18 | AA194027  | PCR primer 2 used      | c 910 | 10.6 | 53.0 | 36 | 22 | AA500638 | DNA encoding human   |
| c 838 | 10.6 | 53.0 | 24 | 15 | AAQ63270  | AXX2 promoter ampl     | c 911 | 10.6 | 53.0 | 36 | 22 | AA500640 | DNA encoding human   |
| c 839 | 10.6 | 53.0 | 24 | 16 | AAQ81998  | Reverse PCR primer     | c 912 | 10.6 | 53.0 | 37 | 24 | AA168838 | Escherichia coli S   |
| c 840 | 10.6 | 53.0 | 24 | 20 | AAAH0096  | Human PRO355 PCR p     | c 913 | 10.6 | 53.0 | 38 | 14 | AAQ47242 | Cre gene left prim   |
| c 841 | 10.6 | 53.0 | 24 | 21 | AAAH49502 | Primer for isolati     | c 914 | 10.6 | 53.0 | 38 | 17 | AA109869 | Human neurotansmi    |
| c 842 | 10.6 | 53.0 | 24 | 24 | ABQ02855  | Oligonucleotide ad     | c 915 | 10.6 | 53.0 | 39 | 13 | AAQ31547 | Human heterodimer    |
| c 843 | 10.6 | 53.0 | 24 | 24 | ABQ09588  | Oligonucleotide ad     | c 916 | 10.6 | 53.0 | 39 | 17 | AA107471 | Probe derived from   |
| c 844 | 10.6 | 53.0 | 24 | 24 | ABQ09629  | Oligonucleotide ad     | c 917 | 10.6 | 53.0 | 39 | 18 | AAV04386 | Primer used in pre   |
| c 845 | 10.6 | 53.0 | 24 | 24 | AB153001  | Human PKBP protein     | c 918 | 10.6 | 53.0 | 39 | 22 | AA500630 | DNA encoding human   |
| c 846 | 10.6 | 53.0 | 24 | 24 | AB182634  | Capture oligonucleo    | c 919 | 10.6 | 53.0 | 39 | 22 | AA578827 | Oligonucleotide #4   |
| c 847 | 10.6 | 53.0 | 24 | 24 | AB182635  | Capture oligonucleo    | c 920 | 10.6 | 53.0 | 40 | 21 | AA573291 | Single base extens   |
| c 848 | 10.6 | 53.0 | 24 | 24 | AB191900  | Capture oligonucleo    | c 921 | 10.6 | 53.0 | 40 | 22 | AA57322  | PCR primer, Seq ID   |
| c 849 | 10.6 | 53.0 | 24 | 24 | AB191901  | Capture oligonucleo    | c 922 | 10.6 | 53.0 | 40 | 24 | AA228091 | HPV18 genomic DNA    |
| c 850 | 10.6 | 53.0 | 25 | 12 | AAQ13773  | HBV primer number      | c 923 | 10.6 | 53.0 | 41 | 19 | AAV50972 | Maize polymorphic    |
| c 851 | 10.6 | 53.0 | 25 | 18 | AAQ22290  | Breast cancer tiss     | c 924 | 10.6 | 53.0 | 41 | 19 | AAV50982 | Maize polymorphic    |
| c 852 | 10.6 | 53.0 | 25 | 18 | AAQ75970  | DEN-2 cloning/sequ     | c 925 | 10.6 | 53.0 | 41 | 19 | AAV50635 | Brassica sp. polym   |
| c 853 | 10.6 | 53.0 | 25 | 20 | AAK36226  | Primer used for se     | c 926 | 10.6 | 53.0 | 41 | 19 | AAV50636 | Brassica sp. polym   |
| c 854 | 10.6 | 53.0 | 25 | 22 | AA153002  | Mouse IFN-gamma #2     | c 927 | 10.6 | 53.0 | 41 | 19 | AAV50624 | Brassica sp. polym   |
| c 855 | 10.6 | 53.0 | 25 | 22 | AAQ10752  | Mycobacterium tub      | c 928 | 10.6 | 53.0 | 41 | 19 | AAV77789 | Maize polymorphic    |
| c 856 | 10.6 | 53.0 | 26 | 14 | AAQ50859  | Hepatitis B virus      | c 929 | 10.6 | 53.0 | 41 | 24 | AB196054 | Brassica polymorph   |
| c 857 | 10.6 | 53.0 | 26 | 16 | AAQ86606  | Hepatitis B virus      | c 930 | 10.6 | 53.0 | 41 | 24 | AB196055 | Brassica polymorph   |
| c 858 | 10.6 | 53.0 | 26 | 17 | AAQ42412  | HBV region 2 probe     | c 931 | 10.6 | 53.0 | 41 | 24 | AB142189 | Probe #1 for of hu   |
| c 859 | 10.6 | 53.0 | 26 | 17 | AA115551  | Hepatitis B virus      | c 932 | 10.6 | 53.0 | 41 | 24 | AB142190 | Probe #2 for of hu   |
| c 860 | 10.6 | 53.0 | 26 | 18 | AA145941  | Target-specific am     | c 933 | 10.6 | 53.0 | 41 | 24 | AAK92420 | Human cyclin d4 f    |
| c 861 | 10.6 | 53.0 | 26 | 19 | AAV66439  | Hepatitis B virus      | c 934 | 10.6 | 53.0 | 42 | 18 | AA179375 | DNA strand for ad    |
| c 862 | 10.6 | 53.0 | 26 | 20 | AAZ31586  | Probe for TMA, Sy      | c 935 | 10.6 | 53.0 | 43 | 10 | AAH91242 | Synthetic oligomer   |
| c 863 | 10.6 | 53.0 | 26 | 20 | AAZ31711  | HBV region 2 probe     | c 936 | 10.6 | 53.0 | 43 | 21 | AAH95430 | Trichoderma revers   |
| c 864 | 10.6 | 53.0 | 27 | 20 | AAH18845  | Extension reaction     | c 937 | 10.6 | 53.0 | 44 | 18 | AAV04384 | Primer used in pre   |
| c 865 | 10.6 | 53.0 | 27 | 22 | AA500641  | DNA encoding human     | c 938 | 10.6 | 53.0 | 44 | 18 | AA179400 | DNA strand for ad    |
| c 866 | 10.6 | 53.0 | 27 | 22 | AA500642  | DNA encoding human     | c 939 | 10.6 | 53.0 | 44 | 22 | AA578825 | Oligonucleotide #4   |
| c 867 | 10.6 | 53.0 | 27 | 22 | AAH38166  | SNP specific lower     | c 940 | 10.6 | 53.0 | 45 | 21 | AA673947 | Single base extens   |
| c 868 | 10.6 | 53.0 | 27 | 22 | AAH61799  | R. subtilis NRP5 a     | c 941 | 10.6 | 53.0 | 45 | 21 | AAZ36838 | 5' PCR primer used   |
| c 869 | 10.6 | 53.0 | 28 | 18 | AA171728  | Primer 2 for ampl      | c 942 | 10.6 | 53.0 | 45 | 22 | AA300626 | DNA encoding human   |
| c 870 | 10.6 | 53.0 | 28 | 18 | AA177202  | Fibroblast growth      | c 943 | 10.6 | 53.0 | 45 | 23 | AA167879 | Human interferon     |
| c 871 | 10.6 | 53.0 | 29 | 19 | AAH58371  | Probe for coding s     | c 944 | 10.6 | 53.0 | 46 | 20 | AAZ22923 | DE19736591 primer    |
| c 872 | 10.6 | 53.0 | 30 | 14 | AAQ45830  | HBV capture probe      | c 945 | 10.6 | 53.0 | 47 | 21 | AAZ67701 | Human map-related    |
| c 873 | 10.6 | 53.0 | 30 | 19 | AAV07827  | HBV-89 capture pro     | c 946 | 10.6 | 53.0 | 47 | 21 | AAZ68483 | Human map-related    |
| c 874 | 10.6 | 53.0 | 30 | 20 | AAV83056  | Capture probe HBV      | c 947 | 10.6 | 53.0 | 47 | 21 | AAZ69317 | Human map-related    |
| c 875 | 10.6 | 53.0 | 30 | 21 | AAH15412  | Primer for DNA enc     | c 948 | 10.6 | 53.0 | 47 | 22 | AAU10663 | Strand 5 of type A   |
| c 876 | 10.6 | 53.0 | 30 | 21 | AAH15414  | Primer for DNA enc     | c 949 | 10.6 | 53.0 | 48 | 22 | AAU10664 | Strand 5 of double   |
| c 877 | 10.6 | 53.0 | 30 | 21 | AAH15415  | Primer for DNA enc     | c 950 | 10.6 | 53.0 | 48 | 22 | AA500629 | DNA encoding human   |
| c 878 | 10.6 | 53.0 | 30 | 21 | AAZ52111  | Maize CBM312BR_n2      | c 951 | 10.6 | 53.0 | 48 | 22 | AA500697 | Human oligo 14 to    |
| c 879 | 10.6 | 53.0 | 30 | 21 | AAZ52187  | Primer CBM312BR_n      | c 952 | 10.6 | 53.0 | 49 | 12 | AAQ11337 | Probe E660 Spec111   |
| c 880 | 10.6 | 53.0 | 30 | 21 | AAZ46066  | PCR primer used fo     | c 953 | 10.6 | 53.0 | 49 | 20 | AAH50335 | Human E124 PCR pri   |
| c 881 | 10.6 | 53.0 | 30 | 22 | AA543957  | Neisseria meningit     | c 954 | 10.6 | 53.0 | 50 | 20 | AAZ34032 | Human PRO615 hybr    |
| c 882 | 10.6 | 53.0 | 30 | 22 | AAH45906  | Human HERT hybrid      | c 955 | 10.6 | 53.0 | 50 | 20 | AAZ59134 | Human interferon     |
| c 883 | 10.6 | 53.0 | 30 | 22 | AA500633  | DNA encoding human     | c 956 | 10.6 | 53.0 | 50 | 21 | AAZ78707 | Human PRO615 hybr    |
| c 884 | 10.6 | 53.0 | 30 | 22 | AA500634  | A. orientalis subs     | c 957 | 10.6 | 53.0 | 50 | 21 | AA508147 | Human PRO615 hybr    |
| c 885 | 10.6 | 53.0 | 30 | 22 | AAH87503  | Corynebacterium th     | c 958 | 10.6 | 53.0 | 50 | 21 | AAU01244 | Hybridisation prob   |



PT New peptides containing a membrane-translocating sequence used to  
 develop products for use in, e.g. vaccines -  
 XX  
 PS Disclosure; Page 9; 85pp; English.  
 XX Sequences AA28750-228757 represent truncated coding regions based on  
 the coding region of a novel membrane-translocating peptide sequence  
 (MTS; AA28749). The invention relates to the use of the MTS peptides  
 for generating fusion proteins which can be used for the production of  
 CC polypeptides of interest such as Schistosoma japonicum glutathione S  
 CC transferase, an adenovirus E3 19K protein or a mammalian p53 protein.  
 CC Fusions of the peptides can also be used for inducing an immune response  
 CC in a mammal using e.g. a viral polypeptide such as hepatitis B  
 CC surface antigen. They can also be used for protecting a subject from an  
 CC infectious agent using a polypeptide that inhibits reproduction of the  
 CC infectious agent such as a protease inhibitor. They can also be used for  
 CC treating cancer using a polypeptide tumor suppressor such as p53 protein  
 CC or a polypeptide inhibitor of hcl-2. The methods can be used for  
 CC treating canine, feline and bovine diseases and also for studying  
 CC intracellular proteins.  
 XX  
 SQ Sequence 23 BP; 1 A; 9 C; 4 G; 9 T; 0 other;

Query Match 79.0%; Score 15.8; DB 20; Length 23;  
 Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GCAGCAGCTCTCTCCGCTG 19  
 ||||| ||||| ||||| ||  
 DB 1 GCAGCAGCTCTCTCCGCTG 19

RESULT 4  
 AA28751  
 ID AA28751 standard; DNA: 27 BP.  
 AC AA28751:  
 XX  
 XX 01-FEB-2000 (first entry)  
 XX  
 XX Truncated membrane-translocating peptide sequence coding region #2.  
 XX  
 KW Membrane-translocating peptide sequence; MTS; fusion protein; production;  
 KW Schistosoma japonicum; glutathione S transferase; adenovirus; mammal;  
 KW p53; immune response; hepatitis B virus; surface antigen; canine; feline;  
 KW protease inhibitor; cancer; tumor suppressor; bovine; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX W09949879-A1.  
 FN  
 XX 07-OCT-1999.  
 XX  
 XX 31-MAR-1999; 99WO-US07189.  
 XX  
 XX 31-MAR-1998; 98US-0080083.  
 XX  
 XX 04-NOV-1998; 98US-0186170.  
 XX  
 XX (UYVA-) UNIV VANDERBILT.  
 XX  
 XX Lin Y, Donahue JP, Rojas M, Tan ZJ;  
 XX  
 XX WPI; 1999-610819/52.  
 XX  
 XX P-PSDB; AAY44162.

PT New peptides containing a membrane-translocating sequence used to  
 develop products for use in, e.g. vaccines -  
 XX  
 PS Disclosure; Page 9; 85pp; English.  
 XX Sequences AA28750-228757 represent truncated coding regions based on  
 the coding region of a novel membrane-translocating peptide sequence  
 (MTS; AA28749). The invention relates to the use of the MTS peptides  
 for generating fusion proteins which can be used for the production of  
 CC polypeptides of interest such as Schistosoma japonicum glutathione S  
 CC transferase, an adenovirus E3 19K protein or a mammalian p53 protein.  
 CC Fusions of the peptides can also be used for inducing an immune response  
 CC in a mammal using e.g. a viral polypeptide such as hepatitis B  
 CC surface antigen. They can also be used for protecting a subject from an  
 CC infectious agent using a polypeptide that inhibits reproduction of the  
 CC infectious agent such as a protease inhibitor. They can also be used for

CC for generating fusion proteins which can be used for the production of  
 CC polypeptides of interest such as Schistosoma japonicum glutathione S  
 CC transferase, an adenovirus E3 19K protein or a mammalian p53 protein.  
 CC Fusions of the peptides can also be used for inducing an immune response  
 CC in a mammal using e.g. a viral polypeptide such as hepatitis B  
 CC surface antigen. They can also be used for protecting a subject from an  
 CC infectious agent using a polypeptide that inhibits reproduction of the  
 CC infectious agent such as a protease inhibitor. They can also be used for  
 CC treating cancer using a polypeptide tumor suppressor such as p53 protein  
 CC or a polypeptide inhibitor of hcl-2. The methods can be used for  
 CC treating canine, feline and bovine diseases and also for studying  
 CC intracellular proteins.  
 XX

SQ Sequence 27 BP; 1 A; 10 C; 4 G; 12 T; 0 other;  
 Query Match 79.0%; Score 15.8; DB 20; Length 27;  
 Best Local Similarity 89.5%; Pred. No. 3.4e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GCAGCAGCTCTCTCCGCTG 19  
 ||||| ||||| ||||| ||  
 DB 1 GCAGCAGCTCTCTCCGCTG 19

RESULT 4  
 AA28752  
 ID AA28752 standard; DNA: 40 BP.  
 AC AA28752:  
 XX  
 XX 01-FEB-2000 (first entry)  
 XX  
 XX Truncated membrane-translocating peptide sequence coding region #3.  
 XX  
 KW Membrane-translocating peptide sequence; MTS; fusion protein; production;  
 KW Schistosoma japonicum; glutathione S transferase; adenovirus; mammal;  
 KW p53; immune response; hepatitis B virus; surface antigen; canine; feline;  
 KW protease inhibitor; cancer; tumor suppressor; bovine; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX W09949879-A1.  
 FN  
 XX 07-OCT-1999.  
 XX  
 XX 31-MAR-1999; 99WO-US07189.  
 XX  
 XX 31-MAR-1998; 98US-0080083.  
 XX  
 XX 04-NOV-1998; 98US-0186170.  
 XX  
 XX (UYVA-) UNIV VANDERBILT.  
 XX  
 XX Lin Y, Donahue JP, Rojas M, Tan ZJ;  
 XX  
 XX WPI; 1999-610819/52.  
 XX  
 XX P-PSDB; AAY44163.

PT New peptides containing a membrane-translocating sequence used to  
 develop products for use in, e.g. vaccines -  
 XX  
 PS Disclosure; Page 9; 85pp; English.  
 XX Sequences AA28750-228757 represent truncated coding regions based on  
 the coding region of a novel membrane-translocating peptide sequence  
 (MTS; AA28749). The invention relates to the use of the MTS peptides  
 for generating fusion proteins which can be used for the production of  
 CC polypeptides of interest such as Schistosoma japonicum glutathione S  
 CC transferase, an adenovirus E3 19K protein or a mammalian p53 protein.  
 CC Fusions of the peptides can also be used for inducing an immune response  
 CC in a mammal using e.g. a viral polypeptide such as hepatitis B  
 CC surface antigen. They can also be used for protecting a subject from an  
 CC infectious agent using a polypeptide that inhibits reproduction of the  
 CC infectious agent such as a protease inhibitor. They can also be used for

CC for generating fusion proteins which can be used for the production of  
 CC polypeptides of interest such as Schistosoma japonicum glutathione S  
 CC transferase, an adenovirus E3 19K protein or a mammalian p53 protein.  
 CC Fusions of the peptides can also be used for inducing an immune response  
 CC in a mammal using e.g. a viral polypeptide such as hepatitis B  
 CC surface antigen. They can also be used for protecting a subject from an  
 CC infectious agent using a polypeptide that inhibits reproduction of the  
 CC infectious agent such as a protease inhibitor. They can also be used for

cc Treating cancer using a polypeptide tumor suppressor such as p53 protein  
 cc or a polypeptide inhibitor of bel-2. The methods can be used for  
 cc treating canine, feline and bovine diseases and also for studying  
 cc intracellular proteins.

sq Sequence 40 BP; 1 A; 12 C; 5 G; 12 T; 0 other;

Query Match 79.0%; Score 15.8; DB 20; Length 40;  
 Best Local Similarity 89.5%; Prod. No. 3,500,023;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAAAGAGTCTTCTCCGCG 19  
 ||||| ||||| ||||| ||  
 DB 1 GAAAGAGTCTTCTCCGCG 19

RESULT 5  
 AAZ28754  
 ID AAZ28754 standard; DNA: 44 BP;  
 XX  
 AC AAZ28754;  
 XX  
 DT 01 FEB 2000 (first entry)  
 XX  
 DE Truncated membrane-translocated peptide sequence coding region #4.  
 XX  
 KW Membrane translocating peptide sequence; MTS; fusion protein; production;  
 KW Schistosoma japonicum; glutathione S transferase; adenovirus; mammal;  
 KW p53; immune response; hepatitis B virus; surface antigen; canine; feline;  
 KW protease inhibitor; cancer; tumor suppressor; bovine; ss.  
 XX  
 CS Synthetic.

XX  
 XX W09049879 AL.  
 XX  
 DT 07 OCT 1999.

XX  
 PF 41 MAR 1999; 9900 US07189.  
 XX  
 PR 41 MAR 1998; 9805 0080084.  
 PR 04 NOV 1998; 9805 0186170.

XX  
 XX (UYVA-) UNIV VANDERBILT.  
 XX  
 XX Lin Y, Bandhua JP, Rojas M, Tan ZJ;

XX  
 XX WPL: 1999 610619/52.  
 XX  
 DR P PSDB; AAV44164.

XX  
 PF New peptides containing a membrane translocating sequence used to  
 PF develop products for use in, e.g., vaccines  
 XX  
 PS Disclosure; Page 9; 85pp; English.

XX  
 cc Sequences AAZ28750 Z8757 represent truncated coding regions based on  
 cc the coding region of a novel membrane-translocated peptide sequence  
 cc (MTS; AAZ28749). The invention relates to the use of the MTS peptides  
 cc for generating fusion proteins which can be used for the production of  
 cc polypeptides of interest such as Schistosoma japonicum glutathione S  
 cc transferase, an adenovirus E3 19K protein or a mammalian p53 protein.  
 cc Fusions of the peptides can also be used for inducing an immune response  
 cc in a mammal using e.g., a viral polypeptide such as hepatitis B  
 cc surface antigen. They can also be used for protecting a subject from an  
 cc infectious agent using a polypeptide that inhibits reproduction of the  
 cc infectious agent such as a protease inhibitor. They can also be used for  
 cc treating cancer using a polypeptide tumor suppressor such as p53 protein  
 cc or a polypeptide inhibitor of bel-2. The methods can be used for  
 cc treating canine, feline and bovine diseases and also for studying  
 cc intracellular proteins.

sq Sequence 44 BP; 2 A; 13 C; 6 G; 12 T; 0 other;

Query Match 79.0%; Score 15.8; DB 20; Length 44;

Best Local Similarity 89.5%; Prod. No. 3,500,023;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAAAGAGTCTTCTCCGCG 19  
 ||||| ||||| ||||| ||  
 DB 1 GAAAGAGTCTTCTCCGCG 19

RESULT 6  
 AAZ28749  
 ID AAZ28749 standard; DNA: 44 BP;  
 XX  
 AC AAZ28749;  
 XX  
 DT 01 FEB 2000 (first entry)  
 XX  
 DE Membrane translocating peptide sequence coding region.

XX  
 KW Membrane translocating peptide sequence; MTS; fusion protein; production;  
 KW Schistosoma japonicum; glutathione S transferase; adenovirus; mammal;  
 KW p53; immune response; hepatitis B virus; surface antigen; canine; feline;  
 KW protease inhibitor; cancer; tumor suppressor; bovine; ss.  
 XX  
 CS Synthetic.

XX  
 XX W09049879 AL.  
 XX  
 DT 07 OCT 1999.

XX  
 PF 41 MAR 1999; 9900 US07189.  
 XX  
 PR 41 MAR 1998; 9805 0080084.  
 PR 04 NOV 1998; 9805 0186170.

XX  
 XX (UYVA-) UNIV VANDERBILT.  
 XX  
 XX Lin Y, Bandhua JP, Rojas M, Tan ZJ;

XX  
 XX WPL: 1999 610619/52.  
 XX  
 DR P PSDB; AAV44164.

XX  
 PF New peptides containing a membrane translocating sequence used to  
 PF develop products for use in, e.g., vaccines  
 XX  
 PS Disclosure; Page 8; 85pp; English.

XX  
 cc This sequence represents the coding region for a novel membrane-  
 cc translocating peptide sequence (MTS). The invention relates to the use  
 cc of the MTS peptides for generating fusion proteins which can be used for  
 cc the production of polypeptides of interest such as Schistosoma japonicum  
 cc glutathione S transferase, an adenovirus E3 19K protein or a mammalian  
 cc p53 protein. Fusions of the peptides can also be used for inducing an  
 cc immune response in a mammal using e.g., a viral polypeptide such as  
 cc hepatitis B surface antigen. They can also be used for protecting a  
 cc subject from an infectious agent using a polypeptide that inhibits  
 cc reproduction of the infectious agent such as a protease inhibitor.  
 cc They can also be used for treating cancer using a polypeptide tumor  
 cc suppressor such as p53 protein or a polypeptide inhibitor of bel-2.  
 cc The methods can be used for treating canine, feline and bovine diseases  
 cc and also for studying intracellular proteins.

sq Sequence 44 BP; 2 A; 14 C; 6 G; 12 T; 0 other;

Query Match 79.0%; Score 15.8; DB 20; Length 44;

Best Local Similarity 89.5%; Prod. No. 3,500,023;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAAAGAGTCTTCTCCGCG 19  
 ||||| ||||| ||||| ||  
 DB 1 GAAAGAGTCTTCTCCGCG 19

RESULT 7



```

AAZ19814/c
10 AAZ19814 standard: DNA: 39 BP.
XX
AC AAZ19814;
XX
DE 06-DEC-1999 (first entry)
XX
DE Membrane translocating sequence (MTS) 3' PCR primer.
XX
KW Cytochrome; targeting; localisation; cancer; tumour; prodnug; reduction;
KW nucleus; PCR; primer; ss.
XX
OS Synthetic.
XX
PN W09045127-AZ.
XX
PD 10-SEP-1999.
XX
PF 05-MAR-1999; 99W03GB00674.
XX
PR 06-MAR-1998; 98GB-0004841.
PR 19-AUG-1998; 98GB-0018103.
PR 29-JAN-1999; 99GB-0002081.
XX
FA (XFER) OXFORD BIOMEDICA UK LTD.
XX
PI Stratford IJ, Patterson AV, Kingsman SM, Kan O, Griffiths L;
PI Mitrophanous K;
XX
XX WPI: 1999-551046/46.
XX
PT New prodnug activating agent targeted to selected cells or tissues,
PT particularly hypoxic cells, for treating e.g. tumors -
XX
PS Example 9; Page 127; 187pp; English.
XX
CC This sequence represents a membrane translocating sequence (MTS)
CC 3' PCR primer, used with a 5' primer (AAZ19812) in the construction
CC of a vector encoding a fusion protein comprising anti-5T4
CC antigen secreted single chain antibody Fv fragment (5T4scFv.
CC AAZ12294), the membrane translocating sequence and the P450R
CC derivative, anchored P450R (AAZ42287). Construction of this
CC fusion protein enables it to be delivered to other cells where it is
CC then transported to the nucleus. Many drugs' sites of action are in the
CC nucleus, rather than the cytoplasm, where P450R normally functions.
CC P450R or its derivatives can be used to activate prodnugs to their active
CC form via reduction. Administration of a prodnug is useful where the
CC active drug may be metabolised before it reaches its site of action or
CC where the active drug is cytotoxic, e.g., anticancer drugs. P450R
CC derivative fusion proteins, or vectors that express them, are
CC specifically used to treat tumours, inflammation, atherosclerosis and
CC muscular dystrophy, but may also be used to treat many other conditions,
CC e.g., cerebral malaria, rheumatoid arthritis, or conditions associated
CC with hypoxia, ischaemia or hypoglycemia, or to deliver antibiotics,
CC antiviral agents, anaesthetics, anti-inflammatories,
CC anti-neoplastic agents and diagnostic agents.
XX
SQ Sequence 39 BP; 13 A; 6 C; 16 G; 4 T; 0 other;

Query Match: 79.0%; Score 15.8; DB 20; Length 39;
Best Local Similarity 89.5%; Prod. No. 3,6002;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGAGTCTCTCTCGG 19
   111111111111111111
DB 39 GAGAGAGTCTCTCTCGG 21

RESULT 9
AAZ07779/c
10 AAZ07779 standard: DNA: 39 BP.
XX
AC AAZ07779;

```

```

XX
DT 23-NOV-1999 (first entry)
XX
DE Membrane translocating sequence (MTS) amplifying 3' primer.
XX
KW Prodnug; localization domain; tumor-selective antibody; cytochrome P450;
KW prodnug activating domain; modified hematopoietic stem cell; MHSO; tumor;
KW inflammation; atherosclerosis; muscular dystrophy; cerebral malaria;
KW rheumatoid arthritis; hypoxia; ischemia; hypoglycemia; PCR primer;
KW membrane translocating sequence; MTS; ss.
XX
OS Synthetic.
XX
PN W09945126-AZ.
XX
PD 10-SEP-1999.
XX
PF 05-MAR-1999; 99W03GB00672.
XX
PR 06-MAR-1998; 98GB-0004841.
PR 19-AUG-1998; 98GB-0018103.
PR 29-JAN-1999; 99GB-0002081.
XX
FA (XFER) OXFORD BIOMEDICA UK LTD.
XX
PI Stratford IJ, Patterson AV, Kingsman SM, Kan O, Griffiths L;
PI Mitrophanous K;
XX
XX WPI: 1999-540852/45.
XX
PT New prodnug activating agent targeted to selected cells or tissues,
PT particularly hypoxic cells, for treating e.g. tumors or inflammation -
XX
PS Example 9B; Page 92; 149pp; English.
XX
CC The invention provides a new prodnug activating agent that comprises:
CC (i) a localization domain (LD); other than a tumor-selective antibody) and
CC a prodnug activating domain (PAD); (ii) at least one nucleic acid
CC encoding a cytochrome P450 and under control of at least one constitutive
CC or inducible expression control sequence or (iii) a modified
CC hematopoietic stem cell (MHSO) containing at least one nucleic acid
CC encoding a PAD and under control of elements as in (ii). The prodnug
CC activating agent or vectors that express them, are specifically used to
CC treat tumors, inflammation, atherosclerosis and muscular dystrophy, but
CC may also be used to treat many other conditions, e.g. cerebral malaria,
CC rheumatoid arthritis, or conditions associated with hypoxia, hypoglycemia
CC or ischemia, or to deliver antibiotics, antiviral agents, anaesthetics,
CC anaesthetics, anti-inflammatories, anti-neoplastic agents and diagnostic
CC agents. LD optimize activity of PAD, e.g. by delivering it to selected
CC locations or by delivering it to neighboring cells ( bystander effect ),
CC and allow a reduction in dose of prodnug, and thus of systemic side-
CC effects. Nucleic acids encoding the agent may be expressed selectively
CC in hypoxic cells. Sequences AAZ07778-79 represent primers for amplifying
CC a membrane translocating sequence (MTS). This is used in the
CC construction of a vector expressing a fusion protein comprising a
CC 5T4scFv, human P450 reductase derivative allP450R and a MTS.
XX
SQ Sequence 39 BP; 13 A; 6 C; 16 G; 4 T; 0 other;

Query Match: 79.0%; Score 15.8; DB 20; Length 39;
Best Local Similarity 89.5%; Prod. No. 3,6002;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGAGTCTCTCTCGG 19
   111111111111111111
DB 39 GAGAGAGTCTCTCTCGG 21

RESULT 9
AAZ11804
10 AAZ11804 standard: DNA: 43 BP.
XX
AC AAZ11804;

```

```

XX 05 JUN 2002 (first entry)
XX DNA encoding synthetic pDNA3-E7/MIS protein.
XX
XX Virucides; cytostatic; vaccine; intercellular transport; antigenic;
XX immune response; cytotoxic T lymphocyte; tumour; cancer; pDNA3-E7/MIS;
XX chronic viral infection; veterinary herpesvirus infection; pseudorabies;
XX equine herpesvirus; bovine herpesvirus; Marek's disease virus; chicken;
XX fowl; animal retroviral disease; rabbits; ds.
XX
XX Synthetic.
XX
XX Key location/Qualifiers
XX misc_feature 1..4
XX /*tag: a
XX /note: "also, the 5' end of the complementary strand
XX overhangs the 3' end of this strand by the
XX sequence 5'-AGT-3'"
XX
XX CDS 6...41
XX /*tag: b
XX /partial
XX /product: "pDNA3-E7/MIS peptide"
XX /note: "this sequence lacks a stop codon"
XX
XX W200209945 A2.
XX
XX 07 FEB 2002.
XX
XX 01 AUG 2001; 2001W0052/9966.
XX
XX 01 AUG 2000; 2000US 222189P.
XX 15 FEB 2001; 2001US-2685/9P.
XX 04 APR 2001; 2001US-28104P.
XX
XX (EJ50 ) UNIV JOHNS HOPKINS.
XX
XX Wu T. Hunn C.
XX
XX WP1: 2002.257467/40.
XX P-PSDB; AA077241.
XX
XX New nucleic acids encoding fusion polypeptide comprising intercellular
XX transport polypeptide linked to antigenic polypeptide, useful as
XX therapeutic vaccine for cancer and major chronic viral infections
XX
XX Example 1: Page 39; 102pp; English.
XX
XX The present invention relates to a new nucleic acid molecule that
XX encodes a fusion polypeptide. The fusion protein comprises a first
XX polypeptide comprising at least one intercellular transport polypeptide
XX and a second polypeptide comprising at least one antigenic polypeptide
XX or peptide. The invention also describes an optional linker peptide
XX linking the first and second polypeptide. The nucleic acid is useful as
XX a vaccine for enhancing immune responses, primarily cytotoxic T
XX lymphocyte responses to specific antigens such as tumour or viral
XX antigens. The compositions comprising the nucleic acids are especially
XX useful as a therapeutic vaccine for cancer and for major chronic viral
XX infections, as well as in the treatment of veterinary herpesvirus
XX infections, including equine or bovine herpesvirus, Marek's disease virus
XX in chickens and other fowls, animal retroviral diseases, pseudorabies
XX and rabies. The present nucleic acid sequence encodes the pDNA3-E7/MIS
XX peptide used in the methods of the invention for the generation of
XX pDNA3-E7/MIS expression vector.
XX
XX Sequence 43 BP; 4 A; 18 C; 7 G; 14 T; 0 other;
XX
XX Query Match 79.0%; Score 15.8; DB 24; Length 43;
XX Best Local Similarity 89.5%; Pred. No. 3.6e-02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1 GAGAGAGAGAGAGAGAGAGAG 19
XX ||||| ||||| ||||| |||||

```

```

10 6 GAGAGAGAGAGAGAGAGAG 24
XX
XX RESULT 10
XX AAZ19812
XX AAZ19812 standard; DNA; 46 BP.
XX AC
XX AAZ19812;
XX XX
XX 06-JUN-1999 (first entry)
XX
XX Membrane translocation sequence (MIS) 5' PCR primer.
XX
XX cytochrome; targeting; localisation; cancer; tumour; product; reduction;
XX nucleus; PCR; primer; ss.
XX
XX Synthetic.
XX
XX W09945127 A2.
XX
XX 10 SEP 1999.
XX
XX 05-MAR-1999; 99W030006/4.
XX
XX 06-MAR-1998; 9806 0004841.
XX 19 AUG 1998; 9806 0018104.
XX 29 JAN 1999; 9806 0002061.
XX
XX (XPO ) EXP-DB 60-MED/17A DR L1D.
XX
XX Stratford LJ. Patterson AV. Kindman SM. Kan O. Griffiths J.
XX Mitophamans K.
XX
XX WFL: 1999.551046/46.
XX
XX New product activating agent targeted to selected cells or tissues,
XX particularly hypoxic cells, for treating e.g. tumors
XX
XX Example 9: Page 127; 187pp; English.
XX
XX This sequence represents a membrane translocation sequence (MIS)
XX 5' PCR primer, used with a 3' primer (AAZ19813) in the construction
XX of a vector encoding a fusion protein comprising anti-514
XX antigen secreted single chain antibody Fv fragment (514scFv,
XX AA542294), the membrane translocation sequence and the p450R
XX derivative, anchorless p450R (AA542287). Construction of this
XX fusion protein enables it to be delivered to other cells where it is
XX then transported to the nucleus. Many drugs' sites of action are in the
XX nucleus, rather than the cytoplasm, where p450R normally functions.
XX p450R or its derivatives can be used to activate products to their active
XX form via reduction. Administration of a product is useful where the
XX active drug may be metabolised before it reaches its site of action or
XX where the active drug is cytotoxic, e.g., anticancer drugs. p450R
XX derivative fusion proteins, or vectors that express them, are
XX specifically used to treat tumors, inflammation, atherosclerosis and
XX muscular dystrophy, but may also be used to treat many other conditions,
XX e.g., cerebral malaria, rheumatoid arthritis, or conditions associated
XX with hypoxia, ischaemia or hypoglycaemia, or to deliver antitoxins,
XX antiviral agents, analgesics, anaesthetics, and inflammatory,
XX antineoplastic agents and diagnostic agents.
XX
XX Sequence 46 BP; 4 A; 19 C; 9 G; 14 T; 0 other;
XX
XX Query Match 79.0%; Score 15.8; DB 20; Length 46;
XX Best Local Similarity 89.5%; Pred. No. 3.7e-02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1 GAGAGAGAGAGAGAGAGAGAG 19
XX ||||| ||||| ||||| |||||
XX 11 GAGAGAGAGAGAGAGAGAGAG 29
XX ||||| ||||| ||||| |||||
XX
XX RESULT 11

```

AAZ0777a  
 ID AAZ0777a standard: DNA: 46 BP.  
 XX  
 AC  
 XX  
 ACZ0777b;  
 XX  
 23-NOV-1999 (first entry)  
 XX  
 DE Membrane translocating sequence (MTS) amplifying 5' primer.  
 XX  
 KW Prodrin: localization domain; tumor-selective antibody; cytochrome P450;  
 KW prodrin activating domain; modified hematopoietic stem cell; MISC: tumor;  
 KW inflammation; atherosclerosis; muscular dystrophy; cerebral malaria;  
 KW rheumatoid arthritis; hypoxia; ischemia; hypoglycemia; PCR primer;  
 KW membrane translocating sequence; MTS; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX  
 PN W09045126-A2.  
 XX  
 PD 10-SEP-1999.  
 XX  
 PF 05-MAR-1999; 99WO-0400672.  
 XX  
 PR 06-MAR-1998; 98GB-0004841.  
 PR 19-AUG-1998; 98GB-0018103.  
 PR 29-JAN-1999; 99GB-0002081.  
 XX  
 XX (OFFICE) XP090 RUMEDICA UK LTD.  
 XX  
 PI Stratford IJ, Patterson AV, Kingsman SM, Kan O, Griffiths LJ  
 PI Mitochondrion K;  
 XX  
 DR WPI: 1999-540852/45.  
 XX  
 PI New prodrin activating agent targeted to selected cells or tissues,  
 PI particularly hypoxic cells, for treating e.g. tumors or inflammation -  
 XX  
 FS Example 9B; Page 92; 149pp; English.  
 XX  
 CC The invention provides a new prodrin activating agent that comprises:  
 CC (i) a localization domain (LD); other than a tumor-selective antibody) and  
 CC encoding a cytochrome P450 and under control of at least one nucleic acid  
 CC or inducible expression control sequence or (iii) a modified  
 CC hematopoietic stem cell (MISC) containing at least one nucleic acid  
 CC encoding a PAB and under control of elements as in (ii). The prodrin  
 CC activating agent or vectors that express them, are specifically used to  
 CC treat tumors, inflammation, atherosclerosis and muscular dystrophy, but  
 CC may also be used to treat many other conditions, e.g. cerebral malaria,  
 CC rheumatoid arthritis, or conditions associated with hypoxia, hypoglycemia  
 CC or ischemia, or to deliver antibiotics, antiviral agents, analgesics,  
 CC anesthetics, anti-inflammatories, antineoplastic agents and diagnostic  
 CC agents. LD optimize activity of PAB, e.g. by delivering it to selected  
 CC locations or by delivering it to neighboring cells (bystander effect),  
 CC and allow a reduction in dose of prodrin, and thus of systemic side-  
 CC effects. Nucleic acids encoding the agent may be expressed selectively  
 CC in hypoxic cells. Sequences AAZ0777a-79 represent primers for amplifying  
 CC a membrane translocating sequence (MTS). This is used in the  
 CC construction of a vector expressing a fusion protein comprising a  
 CC 51base-p, human P450 reductase derivative aP450R and a MTS.  
 XX  
 SQ Sequence 46 BP; 4 A; 19 C; 9 G; 14 T; 0 other;

Query Match 79.0%; Score 15.8; DB 20;  
 Best Local Similarity 89.5%; Prod. No. 476-02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Q7 1 AAGAGATCTCTCTGGG 19  
 111111111111111111  
 10 11 AAGAGATCTCTCTGGG 29

RESULT 12

AA95108/c  
 ID AA95108 standard: DNA: 23 BP.  
 XX  
 AC  
 XX  
 ACZ05108;  
 XX  
 20-MAY-2002 (first entry)  
 XX  
 DE 10beta-2 gene specific probe.  
 XX  
 KW Aldosterone; cyclooxygenase-2; cardiovascular; epidermal; cardiac;  
 KW vasotrophic; antihypertensive; cerebroprotective; thrombolytic; rat;  
 KW antitumoral; antinflammatory; vulnary; antibacterial; virucide; ss;  
 KW nephrotropic; transforming growth factor beta 1; 10beta-2 probe.  
 XX  
 OS Rattus sp.  
 XX  
 XX  
 PN Key Location/Qualifiers  
 F1 modified\_base 1  
 F1 /\*aa a  
 F1 /note "labeled with 6-carboxyfluorescein (6FAM)"  
 F1 25  
 F1 modified\_base 25  
 F1 /\*aa b  
 F1 /note "5'-6-carboxy-N,N,N',N'-tetramethylrhodamine  
 (TAMRA) quencher dye."  
 XX  
 PN W0200204759-A2.  
 XX  
 PD 07-FEB-2002.  
 XX  
 PF 26-JUL-2001; 2001W01S23601.  
 XX  
 PR 27-JUL-2000; 2000US-221364P.  
 PR 12-JAN-2001; 2001US-261497P.  
 XX  
 XX (PHAA) PHARMACIA CORP.  
 XX  
 PI Koehn R, Zack MD, McMahon EG;  
 PI WPI: 2002-227077/28.  
 XX  
 CC Method for treating or preventing inflammation-related cardiovascular  
 CC disorders comprises administration of an aldosterone antagonist and  
 CC cyclooxygenase-2 inhibitor combination -  
 XX  
 FS Example 18; Page 160; 273pp; English.  
 XX  
 CC The invention provides a method for treating or preventing an  
 CC inflammation-related cardiovascular disorder. The method involves  
 CC administration of an aldosterone antagonist and cyclooxygenase-2  
 CC inhibitor combination or their salts. The method is used to treat or  
 CC prevent inflammation related cardiovascular disorders in the heart,  
 CC kidney and/or brain, e.g. coronary artery disease, aneurysm, embolism,  
 CC arteriosclerosis, atherosclerosis, myocardial infarction, thrombosis,  
 CC stroke, aneurysm, vascular plaque inflammation, vascular plaque rupture,  
 CC Kawasaki disease, vascular or valvular calcification, trauma, surgically-  
 CC bacterial or viral induced inflammation. The use of eplerenone in  
 CC conjunction with the aldosterone receptor antagonist markedly attenuates  
 CC the initial vascular inflammatory response and subsequent myocardial  
 CC injury. Sequences AA95106-138 represent TqMan primers and probes  
 CC designed from known sequences of rat genes such as transforming growth  
 CC factor beta 1 (TGF-beta1), atrial natriuretic factor (ANP), collagen I and  
 CC III, cyclooxygenase-2 (COX-2), osteopontin, monocyte chemoattractant  
 CC protein-1 (MCP-1), intercellular adhesion molecule-1 (ICAM-1), vascular  
 CC adhesion molecule-1 (VCAM-1) and a reference cyclophilin, used in the  
 CC course of the invention.

SQ Sequence 23 BP; 8 A; 7 C; 5 G; 4 T; 0 other;

Query Match 77.0%; Score 15.4; DB 24;  
 Best Local Similarity 94.1%; Prod. No. 5-26-02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGATCTCTCTGGG 20



PS Claim 1: Column 47-48; 5pp; English.

XX The invention relates to antisense compounds which inhibit the expression  
 CC of human caspase 8. The antisense compound is useful for diagnosing  
 CC and treating diseases associated with the expression of caspase 8 and  
 CC for prophylaxis e.g. to prevent or delay infection, inflammation or  
 CC tumour formation, and as a research reagent. The present sequence is  
 CC an antisense compound targeted to mouse caspase 8 mRNA.

XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 other;

Query Match 69.0%; Score 13.8; DB 22; Length 20;

Best Local Similarity 88.2%; Pred. No. 40-04;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

RESULT 16

AAV70942/c

DB AAV70942 standard; DNA; 21 BP.

XX AC

AAV70942;

XX 04 FEB-1999 (first entry)

XX PCR primer used to amplify MAGE-4 mRNA in a nested RT-PCR reaction.

XX MAGE tumour-specific antigen gene; disseminated tumour cell;

XX prostate cancer; non-small or small lung cancer; sarcoma;

XX malignant melanoma; breast cancer; colorectal cancer;

XX tumour adjuvant vaccine; PCR primer; SS.

XX Synthetic.

XX Homo sapiens.

XX W69845788 A2.

XX 22-OCT-1998.

XX 09-APR-1998; 98W-EP02081.

XX 11 APR 1997; 97EP-0106026.

XX (MUR-) MICROMEI GMBH.

XX Kuter P. Zippelhaus A;

XX WPI: 1998-594590/50.

XX New MAGE-derived primers detecting disseminated tumour cells -

XX hybridise to nucleic acid complementary to the mRNA of a gene

XX encoding a MAGE tumour-specific antigen, used for tumour adjuvant

XX vaccines

XX claim 1: Page 46; 6pp; English.

XX PCR primers AAV70942 43 are used for external RT-PCR amplification of a

XX MAGE-4 tumour-specific antigen gene. The primers are used for detecting

XX disseminated tumour cells which indicate a cancerous condition, such as

XX a condition related to prostate cancer, non-small or small lung cancer,

XX sarcoma, malignant melanoma, breast cancer or colorectal cancer. The

XX PCR products of this detection can be used to prepare a tumour adjuvant

XX vaccine.

XX Sequence 21 BP; 7 A; 6 C; 5 G; 3 T; 0 other;

Query Match 69.0%; Score 13.8; DB 19; Length 21;

Best Local Similarity 88.2%; Pred. No. 40-04;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

RESULT 17

AAV50970/c

DB AAV50970 standard; DNA; 40 BP.

XX AC

AAV50970;

XX 05 JUN-2000 (first entry)

XX A. halophila PCR primer-5 for SMT gene expression in E. coli.

XX

QY 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

DB 4 GCACTTCCTCCGAG 20

KW PCR primer; sarcosine-dimethylglycine methyltransferase; SDMT;  
 KW betaine operon; dimethylglycine content; abiotic stress; tolerance;  
 KW salt; freezing; cold; drought stress; pathogenesis-related protein;  
 KW animal feed; pH tolerance; environmental stress;  
 KW inclusion body formation; SS.  
 XX Actinopolyspora halophila.  
 XX W0200011142 A2.  
 FN FN  
 PU 02 MAR 2000.  
 XX  
 XX 1B AUG-1999; 99W0 EP06047.  
 XX  
 XX 20 AUG 1998; 98US 014744.  
 XX  
 XX (CHL1 ) CHL1OR CDRP.  
 XX  
 XX Reinikainen L., Nyssoslahti A., Koronzo J.  
 XX WPI: 2000 224686/19.  
 XX  
 XX New methyltransferases, useful for, e.g., producing transgenic plants  
 PT with increased stress tolerance, pathogen resistance or nutritional  
 PT value as animal feed or for improving the viability of microorganisms  
 PT in the food industry.  
 XX  
 XX Example 10; Page 54; 176pp; English.  
 PS  
 XX The present sequence is a PCR primer used for expressing  
 CC Actinopolyspora halophila sarcosine-dimethylglycine methyltransferase  
 CC (SDMT) gene in E. coli. The SDMT gene which was used for DNA sequencing,  
 CC is used as a template for the PCR reaction. This primer hybridises to  
 CC position 1048-1068 of SDMT gene. Positive E. coli clones were cultivated  
 CC and used in enzyme activity assay. Expression vectors comprising the  
 CC coding region from betaine operon can be used to increase intracellular  
 CC dimethylglycine content. The polynucleotide can be used to increase  
 CC salt, freezing or cold tolerance, increase resistance to drought stress,  
 CC pathogens or induce pathogenesis-related proteins in plants. Transgenic  
 CC organisms can be used as an animal feed ingredient. The polynucleotide  
 CC can also be used to enhance pH tolerance and improve viability of  
 CC organisms when subjected to environmental stress. This can decrease  
 CC inclusion body formation when used in conjunction with polynucleotides  
 CC encoding a heterologous protein.  
 XX  
 XX Sequence 30 BP; 8 A; 9 C; 10 G; 3 T; 0 other;  
 SQ  
 Query Match 68.0%; Score 13.6; 10 Z1; Length 40;  
 Best Local Similarity 80.0%; Pred. No. 3,9000;  
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
 QY 1 GAGAGAGTCTCTCCGCG 20  
 11 11 11 11 11 11 11 11  
 16 24 GAGAGAGTCTCTCCGCG 5  
 RESULT 18  
 ARK71876/c  
 ID ARK71876 standard; DNA; 21 BP.  
 XX  
 XX ARK71876;  
 AC  
 XX 40 JUL-2002 (first entry)  
 PT  
 XX Aspergillus niger PCR primer #67.  
 DE  
 XX Plant antifungal; fungal xylanase; thermostability; xylan; cellulose;  
 KW alcoholic liquid; beer; wine; fruit juice; vegetable juice; asaccharate;  
 KW xerogelling; paper; foodstuff; coffee; plant oil; starch; plant pulp;  
 KW PCR; primer; SS.  
 XX  
 XX Aspergillus niger.  
 CS  
 XX

FN EP1184460 A1.  
 XX  
 PU 06 MAR 2002.  
 XX  
 XX 29 AUG-2000; 2000EP 0307474.  
 XX  
 XX 29 AUG-2000; 2000EP 0307474.  
 XX  
 XX (SIAM ) ISM NV.  
 XX  
 XX Van den Bommelph JFW, Van der Laan JM, Menke BH, Jansen BJ.  
 XX WPI: 2002 332040/37.  
 XX  
 XX Protein for, e.g., treating plant material, comprises fungal xylanase  
 PT modified at exposed serine residues or within positions 90-160  
 XX  
 XX Disclosure; Page 54; 74pp; English.  
 XX  
 XX The present invention relates to a new protein comprising a fungal  
 CC xylanase modified to increase thermostability. The modification is at  
 CC exposed serine residues or within positions 90-160. The invention is  
 CC used in degrading xylan in cellulose, treating plant material, improving  
 CC filterability and/or reducing viscosity of xylan containing liquids,  
 CC improving filterability or clarifying alcoholic liquids (e.g. beer, wine)  
 CC or fruit or vegetable juices, hydrolysing agricultural residues, in  
 CC recycling materials (e.g. containing paper) in papermaking, for  
 CC thickening foodstuffs, and/or extracting desirable materials (e.g.  
 CC coffee, plant oil, starch), processing plant pulp, juice or extract.  
 CC The invention provides a novel protein comprising modified xylanase that  
 CC is up to 10 times or more stable than its unmodified counterparts, and  
 CC yet retains a pH optimum that is acidic. The present nucleic acid  
 CC sequence represents one of a collection (ARK71810-ARK71909) of  
 CC Aspergillus niger PCR primers that were used in the methods of the  
 CC invention to modify the xylanases.  
 XX  
 XX Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 other;  
 SQ  
 Query Match 67.0%; Score 13.4; 10 Z4; Length 21;  
 Best Local Similarity 93.4%; Pred. No. 4,7000;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 4 GAGAGAGTCTCTCCG 18  
 11 11 11 11 11 11 11 11  
 16 19 GAGAGAGTCTCTCCG 5  
 RESULT 19  
 AA194679/c  
 ID AA194679 standard; DNA; 33 BP.  
 XX  
 XX AA194679;  
 XX  
 XX 14 APR 1998 (first entry)  
 PT  
 XX Co stimulatory molecule B7-1 gene amplifying 3' primer B7-1 3'.  
 DE  
 XX Co stimulatory molecule; antigen; B7-1; treatment; tumour;  
 KW microbial infection; vector; B7-1PCR; primer; SS.  
 XX  
 XX Synthetic.  
 CS  
 XX W09732987 A1.  
 FN FN  
 PU 12 SEP 1997.  
 XX  
 XX 07 MAR 1997; 97W0 CA00162.  
 XX  
 XX 08 MAR 1996; 96US 0612554.  
 XX  
 XX (CHOR ) UNIV TOGONTO.  
 XX  
 XX Barber BL, Berntsen NL, Chan AK, Iwasaki A, Sternholm NH;

XX WP: 1997-470548/44.  
 XX Vector containing sequences encoding antigen and co-stimulatory  
 PT molecule used in vaccine for prevention of treatment of microbial  
 PT infection of tumors  
 XX  
 PS Example 2: Page 20; 69pp; English.  
 XX  
 CC This primer is used for the reverse transcriptase PCR amplification of a  
 CC co-stimulatory molecule B7-1. This is used in the construction of a novel  
 CC nucleotide vector containing a sequence encoding at least one antigen and  
 CC a sequence encoding at least one co-stimulatory molecule and a promoter  
 CC coupled to both the encoding sequences. Compositions containing this  
 CC novel vector and a second vector can be used for expressing at least one  
 CC cytokine. The novel nucleotide vector optionally combined with the second  
 CC vector are useful as vaccines to protect against microbial infection and  
 CC to treat infections or neoplastic disease. The vaccines particularly  
 CC induce a cytotoxic T cell (CTL) response. Simultaneous expression of a  
 CC co-stimulatory molecule improves the immune response, particularly where  
 CC the antigen is only weakly immunogenic and the effect is further enhanced  
 CC by cytokines. This allows a reduction in the dose of DNA required. The  
 CC vectors are easy to administer and assemble.  
 XX  
 SQ Sequence 33 BP; 15 A; 6 C; 9 G; 3 T; 0 other;

Query Match 67.0%; Score 13.4; DB 18; Length 33;  
 Best Local Similarity 94.3%; Pred. No. 4.9e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 6 AGAGTTCTTCGGT 20  
 IIIIIIIII IIII  
 ID 2 AGAGTTCTTCGGT 9

RESULT 20  
 ARK71874  
 ID ARK71874 standard; DNA; 33 BP.  
 AC ARK71874;  
 XX  
 DT 30-JUL-2002 (first entry)  
 XX  
 DE Aspergillus niger PCR primer #64.  
 XX  
 KW Plant antifungal; fungal xylanase; thermostability; xylan; cellulose;  
 KW alcoholic liquid; beer; wine; fruit juice; vegetable juice; agriculture;  
 KW recycling; paper; foodstuff; coffee; plant oil; starch; plant pulp;  
 KW PCR; primer; SS.  
 XX  
 OS Aspergillus niger.  
 XX  
 PN EP1184460 A1.  
 XX  
 PD 06-MAR-2002.  
 XX  
 PF 29-AUG-2000; 2000EP-0407474.  
 XX  
 PR 29-AUG-2000; 2000EP-0407474.  
 XX  
 PA (STAM ) DSM NV.  
 XX  
 PI Van den Bommelaere JPW, Van der Laan JM, Menke HH, Baran JG;  
 XX  
 DR WP: 2002-332040/47.  
 XX  
 PT Protein for, e.g., treating plant material, comprises fungal xylanase  
 PT modified at exposed serine residues or within positions 90-160 .  
 XX  
 PS Disclosure: Page 53; 74pp; English.  
 XX  
 CC The present invention relates to a new protein comprising a fungal  
 CC xylanase modified to increase thermostability. The modification is at

CC exposed serine residues or within positions 90-160. The invention is  
 CC used in degrading xylan in cellulose, treating plant material, improving  
 CC filterability and/or reducing viscosity of xylan-containing liquids,  
 CC improving filterability or clarifying alcoholic liquids (e.g. beer, wine)  
 CC or fruit or vegetable juices, hydrolysing agricultural residues, in  
 CC recycling materials (e.g. containing paper) in papermaking, for  
 CC thickening foodstuffs, and/or extracting desirable materials (e.g.,  
 CC coffee, plant oil, starch), processing plant pulp, juice or extract.  
 CC the invention provides a novel protein comprising modified xylanase that  
 CC is up to 10 times or more stable than its unmodified counterparts, and  
 CC yet retains a pH optimum that is acidic. The present nucleic acid  
 CC sequence represents one of a collection (ARK71810-ARK71908) of  
 CC Aspergillus niger PCR primers that were used in the methods of the  
 CC invention to modify the xylanases.

SQ Sequence 33 BP; 6 A; 11 C; 8 G; 6 T; 2 other;

Query Match 67.0%; Score 13.4; DB 24; Length 33;  
 Best Local Similarity 94.3%; Pred. No. 4.9e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGAGTTCTTCGGT 18  
 IIIIIIIII IIIII  
 ID 5 GAGAGTTCTTCGGT 17

RESULT 21  
 ARK71874

ID ARK71874 standard; DNA; 46 BP.

AC ARK71874;

XX  
 DT 30-JUL-2002 (first entry)  
 XX  
 DE Aspergillus niger PCR primer #45.

XX  
 KW Plant antifungal; fungal xylanase; thermostability; xylan; cellulose;  
 KW alcoholic liquid; beer; wine; fruit juice; vegetable juice; agriculture;  
 KW recycling; paper; foodstuff; coffee; plant oil; starch; plant pulp;  
 KW PCR; primer; SS.  
 XX  
 OS Aspergillus niger.

XX  
 PN EP1184460 A1.

XX  
 PD 06-MAR-2002.

XX  
 PF 29-AUG-2000; 2000EP-0307374.

XX  
 PR 29-AUG-2000; 2000EP-0307374.

XX  
 PA (STAM ) DSM NV.

XX  
 PI Van den Bommelaere JPW, Van der Laan JM, Menke HH, Baran JG;

XX  
 DR WP: 2002-332040/47.

XX  
 PT Protein for, e.g., treating plant material, comprises fungal xylanase  
 PT modified at exposed serine residues or within positions 90-160 .

XX  
 PS Disclosure: Page 54; 74pp; English.

XX  
 CC The present invention relates to a new protein comprising a fungal  
 CC xylanase modified to increase thermostability. The modification is at  
 CC exposed serine residues or within positions 90-160. The invention is  
 CC used in degrading xylan in cellulose, treating plant material, improving  
 CC filterability and/or reducing viscosity of xylan-containing liquids,  
 CC improving filterability or clarifying alcoholic liquids (e.g. beer, wine)  
 CC or fruit or vegetable juices, hydrolysing agricultural residues, in  
 CC recycling materials (e.g. containing paper) in papermaking, for  
 CC thickening foodstuffs, and/or extracting desirable materials (e.g.,  
 CC coffee, plant oil, starch), processing plant pulp, juice or extract.  
 CC the invention provides a novel protein comprising modified xylanase that

cc is up to 10 times or more stable than its unmodified counterparts, and  
 cc yet retains a pH optimum that is acidic. The present nucleic acid  
 cc sequence represents one of a collection (ARK71810-ARK71908) of  
 cc Aspergillus niger PCR primers that were used in the methods of the  
 cc invention to modify the xylanases.  
 xx  
 sq Sequence 36 BP; 8 A; 12 C; 8 G; 6 T; 2 other;

Query Match 67.0%; Score 13.4; DB 24; Length 36;

Best Local Similarity 93.8%; Pred. No. 5000;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCTCT 18  
 TTTT TTTTTTTT  
 Db 3 GAGTAACTCTCTCT 17

RESULT 22

ARK71875  
 ID ARK71875 standard; DNA: 49 BP.

XX AC ARK71875;  
 XX 30-300-2002 (first entry)  
 XX Aspergillus niger PCR primer #66.  
 DE Plant antifungal; fungal xylanase; thermostability; xylan; cellulose;  
 KW alcoholic liquid; beer; wine; fruit juice; vegetable juice; agriculture;  
 KW recycling; paper; foodstuff; coffee; plant oil; starch; plant pulp;  
 KW PCR; primer; SS.  
 XX Aspergillus niger.

OS  
 XX EPI184460 AL.

PN  
 XX 06-MAR-2002.

XX 29-AUG-2000; 2000EP-0407474.

XX 29-AUG-2000; 2000EP-0407474.

XX (SIAM ) DSM NV.

XX Van Den Hombrecht JPTW, Van Der Laan JM, Mounk HH, Baram JG;  
 XX WP1: 2002 342040/37.

XX Protein for, e.g. treating plant material, comprises fungal xylanase  
 PT modified at exposed serine residues or within positions 90-160  
 XX Disclosure; Page 54; 74pp; English.  
 PS The present invention relates to a new protein comprising a fungal  
 cc xylanase modified to increase thermostability. The modification is at  
 cc exposed serine residues or within positions 90-160. The invention is  
 cc used in degrading xylan in cellulose, treating plant material, improving  
 cc filterability and/or reducing viscosity of xylan-containing liquids,  
 cc improving filterability or clarifying alcoholic liquids (e.g. beer, wine)  
 cc or fruit or vegetable juices, hydrolysing agricultural residues, in  
 cc recycling materials (e.g. containing paper) in papermaking, for  
 cc thickening foodstuffs, and/or extracting desirable materials (e.g.  
 cc coffee, plant oil, starch), processing plant pulp, juice or extract.  
 cc The invention provides a novel protein comprising modified xylanase that  
 cc is up to 10 times or more stable than its unmodified counterparts, and  
 cc yet retains a pH optimum that is acidic. The present nucleic acid  
 cc sequence represents one of a collection (ARK71810-ARK71908) of  
 cc Aspergillus niger PCR primers that were used in the methods of the  
 cc invention to modify the xylanases.

XX Sequence 49 BP; 8 A; 12 C; 9 G; 8 T; 2 other;

Query Match

67.0%; Score 13.4; DB 24; Length 39;

Best Local Similarity 93.8%; Pred. No. 5000;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCTCT 18  
 TTTT TTTTTTTT  
 Db 3 GAGTAACTCTCTCT 17

RESULT 23

AAA84848  
 ID AAA84848 standard; DNA: 19 BP.

XX AC AAA84848;

XX 04-DEC-2000 (first entry)

XX Cytelin F ribozyme binding site #106.

DE Ribozyme; hairpin; hammerhead; gene therapy; vasotropic;

KW testotoxicis; SS.

XX Mammalia.

XX W0200042765 A2.

PN 08-JUN-2000.

XX 06-DEC-1999; 99WO-0828772.

XX 04-DEC-1998; 98US-0110954.

XX (IMMO-) DEMOSOL INF.

XX Fritz K, Welch EJ, Barber JR, Robbins JM;

XX WP1: 2000 412314/55.

XX New hairpin and hammerhead ribozyme for inhibiting testotoxicis, cleaves  
 PT RNA encoding a cyclin or cell-cycle dependent kinase other than CLK1,  
 PT PCNA and cyclin B1  
 XX Disclosure; Page 83; 10pp; English.  
 PS The present invention relates to a hairpin or hammerhead ribozyme,  
 cc designed to cleave RNA encoding a cyclin or cell cycle dependent kinase  
 cc other than cell cycle dependent kinases CLK1, PCNA and cyclin B1.  
 cc Representative examples of ribozyme recognition sites are given in  
 cc AAA82415 to AAA86787. The ribozyme of the invention is useful for  
 cc inhibiting testotoxicis by introduction of the ribozyme into cells.  
 cc The ribozyme is resistant to endonuclease activity and hence is  
 cc efficient in testotoxicis treatment.

XX Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 other;

Query Match 66.0%; Score 13.2; DB 21; Length 19;

Best Local Similarity 83.8%; Pred. No. 57000;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CAGTACTCTCTCTCTG 19  
 TTT TTTTTTTT  
 Db 2 CAAAGAGCTCTCTCTG 19

RESULT 24

AAH60000  
 ID AAH60000 standard; DNA: 19 BP.

XX AC AAH60000;

XX 10-SEP-2001 (first entry)

XX Cytelin F ribozyme binding site SEQ ID NO:2424.



|    |  |
|----|--|
| KW | Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;              |
| KW | recognition site; target; ribozyme binding site; eye disease; vulvovaginary; |
| KW | proliferative disease; skin disease; psoriasis; diabetic retinopathy;        |
| KW | cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;            |
| KW | matrix metalloproteinase; growth factor; reductase; scarring; cytosolic;     |
| KW | antiproliferative; dermatological; antiseborrheic; antidiabetic; virucide;   |
| KW | antiskinking; ophthalmological; keratolytic; gene therapy; viral wart;       |
| KW | atopic dermatitis; actinic keratosis; squamous cell carcinoma;               |
| KW | basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;              |
| KW | sickle cell retinopathy; ss.   |
| XX |  |
| XX | Homo sapiens.  |
| OS | Synthetic.   |
| XX |  |
| XX | W0200140462-A2.  |
| PN |  |
| XX | 03 MAY 2001.   |
| XX |  |
| XX | 26 OCT 2000; 2000W00529500.  |
| PF |  |
| XX | 26 OCT 1999; 9905-0161542.   |
| PF |  |
| XX | (1MMU-) IMMUSIL, INC.  |
| PA |  |
| XX | Robbins JM, Fritz R;   |
| PT |  |
| XX | W01: 2001-400427/41.   |
| XX |  |
| XX | Treating proliferative skin or eye diseases and scarring, using              |
| PT | ribozymes that cleave RNA encoding cytokines involved in inflammation,       |
| PT | matrix metalloproteinases, growth factors and cell-cycle dependent           |
| PT | kinases.   |
| XX |  |
| XX | Example 1: Page 248; 40pp; English.  |
| PS |  |
| XX | The present invention describes a method for treating a proliferative        |
| CC | skin or eye disease and scarring. The method involves administering a        |
| CC | ribozyme (I) which cleaves RNA encoding a cytokine involved in               |
| CC | inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle             |
| CC | dependent kinase, growth factor or a reductase, or administering a           |
| CC | nucleic acid molecule (II) comprising a promoter operably linked to a        |
| CC | nucleic acid sequence encoding (I). (I) can have antipsoriatic,              |
| CC | dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinking,      |
| CC | ophthalmological, vulvovaginary, keratolytic and virucide activities, and    |
| CC | cleaves RNA encoding cytokine involved in inflammation. (I) can be used      |
| CC | in gene therapy. (I) and (II) are useful for treating proliferative          |
| CC | skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,       |
| CC | squamous or basal cell carcinoma and viral or seborrheic wart. They can      |
| CC | also be used for treating proliferative eye diseases such as diabetic        |
| CC | retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of      |
| CC | prematurity and retinal detachment, and for treating and preventing          |
| CC | scarring such as keloid, adhesion and hypertrophic or hypertrophic burn      |
| CC | scar. AAH67577 to AAH62094 represent sequences used in the                   |
| CC | embodiment of the present invention.   |

```

XX Human biallelic marker downstream amplification primer SEQ ID NO:16442.
XX
XX human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
XX Homo sapiens.
XX
XX W09954500-AZ.
XX
XX Z8-00T 1999.
XX
XX Z1-ATG 1999; 99W0-1H00R22.
XX
XX Z1-ATG 1998; 98US-00R2614.
XX
XX Z3-NEW 1998; 98US-0109732.
XX
XX (GENSE ) GENSE1.
XX
XX Cohen D, Blumentfeld M, Chumakov I;
XX
XX WP1: 2000-01267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 2465; 2745pp; English.
XX
XX AAZ665654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the
XX invention have a variety of uses; they can be used for high density
XX mapping of the human genome, and in complex association studies and
XX haplotyping studies which are useful in determining the genetic basis
XX for disease states. Compositions and methods of the invention can also
XX be useful for the identification of the targets for the development of
XX pharmaceutical agents and diagnostic methods, as well as the
XX characterisation of the differential efficacious responses to and side
XX effects from pharmaceutical agents acting on a disease as well as other
XX treatment.
XX
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297
XX and 3367, are not actually given a sequence in the Sequence Listing
XX from the present invention.
XX
XX Sequence 21 BP; 2 A; 5 C; 5 G; 9 T; 0 other;
XX
XX
XX Query Match 66.00; Score 13.2; DB 21; Length 21;
XX Best Local Similarity 85.00; Pval. No. 5.8e-04;
XX Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 3 AATGATTTTCTTGGTGG 20
XX T T T T T T T T T T T
XX T AATGATTTTCTTGGTGG 18
XX
XX Search completed: March 14, 2004, 11:02:07
XX Job time : 128.62 secs

```



Genware version 5.1.4 p5.4578  
Copyright (c) 1994 - 2003 CompuGen Ltd.

OM nucleic acid nucleic search, using sw model

Run on: March 18, 2003, 10:54:46 : Search time 28.1967 seconds  
(without alignments)  
217.527 Million cell updates/sec

Hitfile: us-09-900-115-5

Perfect score: 20

Sequence: 1 sequenceatttctctcgaq 20

Scoring table: IDENTIFY\_NUC

Gap-p 10.0, Gapext 1.0

Scorched: 44162 seqs, 15338901 residues

Total number of hits satisfying chosen parameters: 609818

Minimum DB seq length: 0

Maximum DB seq length: 50

Post processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : Issued\_Parents\_NA:\*  
1: /cqn2\_6/ptodata/1/ina/5A\_COMB.seq.\*  
2: /cqn2\_6/ptodata/1/ina/5B\_COMB.seq.\*  
3: /cqn2\_6/ptodata/1/ina/6A\_COMB.seq.\*  
4: /cqn2\_6/ptodata/1/ina/6B\_COMB.seq.\*  
5: /cqn2\_6/ptodata/1/ina/PCIOS\_COMB.seq.\*  
6: /cqn2\_6/ptodata/1/ina/backfile1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description       |
|------------|-------|-------------|--------|----|-------------------|
| 1          | 15.8  | 79.0        | 24     | 4  | US-09-186-170-11  |
| 2          | 15.8  | 79.0        | 24     | 4  | US-09-562-868-11  |
| 3          | 15.8  | 79.0        | 27     | 4  | US-09-186-170-12  |
| 4          | 15.8  | 79.0        | 27     | 4  | US-09-562-868-12  |
| 5          | 15.8  | 79.0        | 30     | 4  | US-09-186-170-13  |
| 6          | 15.8  | 79.0        | 30     | 4  | US-09-562-868-13  |
| 7          | 15.8  | 79.0        | 33     | 4  | US-09-186-170-14  |
| 8          | 15.8  | 79.0        | 33     | 4  | US-09-562-868-14  |
| 9          | 15.8  | 79.0        | 36     | 4  | US-09-186-170-10  |
| 10         | 15.8  | 79.0        | 36     | 4  | US-09-562-868-10  |
| 11         | 14.8  | 66.0        | 20     | 4  | US-09-487-445-165 |
| 12         | 14.2  | 66.0        | 39     | 3  | US-08-648-505-2   |
| 13         | 14.2  | 66.0        | 39     | 4  | US-09-277-455-2   |
| 14         | 14.2  | 66.0        | 48     | 1  | US-08-471-791-35  |
| 15         | 14.2  | 66.0        | 48     | 5  | PCT-US91-01746-35 |
| 16         | 14    | 65.0        | 48     | 4  | US-08-505-250-32  |
| 17         | 14    | 65.0        | 48     | 4  | US-08-505-250-32  |
| 18         | 14    | 65.0        | 40     | 4  | US-08-505-250-33  |
| 19         | 14    | 65.0        | 40     | 4  | US-08-505-250-52  |
| 20         | 14    | 65.0        | 40     | 4  | US-08-505-250-34  |
| 21         | 14    | 65.0        | 40     | 4  | US-08-505-250-52  |
| 22         | 14    | 65.0        | 42     | 4  | US-08-505-250-51  |
| 23         | 14    | 65.0        | 42     | 4  | US-08-505-250-51  |
| 24         | 12.8  | 64.0        | 33     | 4  | US-09-186-170-18  |
| 25         | 12.8  | 64.0        | 33     | 4  | US-09-562-868-18  |
| 26         | 12.8  | 64.0        | 47     | 4  | US-09-641-638-975 |
| 27         | 12.6  | 63.0        | 25     | 2  | US-08-692-787-39  |

|                     |    |   |                    |      |      |     |
|---------------------|----|---|--------------------|------|------|-----|
| Sequence 39, Appl   | 25 | 4 | US-09-097-199-39   | 63.0 | 12.6 | 28  |
| Sequence 35, Appl   | 37 | 1 | US-07-734-225A-35  | 63.0 | 12.6 | 29  |
| Sequence 35, Appl   | 37 | 1 | US-07-692-995B-35  | 63.0 | 12.6 | 30  |
| Sequence 35, Appl   | 37 | 1 | US-08-488-457-35   | 63.0 | 12.6 | 31  |
| Sequence 85, Appl   | 40 | 4 | US-09-091-814-85   | 63.0 | 12.6 | 32  |
| Sequence 45, Appl   | 46 | 1 | US-07-692-995B-45  | 63.0 | 12.6 | 33  |
| Sequence 310, Appl  | 47 | 4 | US-09-338-907-310  | 63.0 | 12.6 | 34  |
| Sequence 310, Appl  | 47 | 4 | US-09-218-207-310  | 63.0 | 12.6 | 35  |
| Sequence 6, Appl    | 50 | 1 | US-08-325-243A-6   | 62.0 | 12.6 | 36  |
| Sequence 412, Appl  | 27 | 1 | US-08-758-306-412  | 62.0 | 12.4 | 37  |
| Sequence 3, Appl    | 34 | 4 | US-08-793-666-3    | 62.0 | 12.4 | 38  |
| Sequence 2, Appl    | 37 | 2 | US-09-157-206-2    | 62.0 | 12.4 | 39  |
| Sequence 2, Appl    | 37 | 4 | US-09-447-863-2    | 62.0 | 12.4 | 40  |
| Sequence 2, Appl    | 37 | 4 | US-09-581-326-2    | 62.0 | 12.4 | 41  |
| Sequence 28, Appl   | 21 | 4 | US-09-123-030-28   | 61.0 | 12.2 | 42  |
| Sequence 6, Appl    | 22 | 2 | US-08-494-151-6    | 61.0 | 12.2 | 43  |
| Sequence 40, Appl   | 23 | 3 | US-08-470-335-40   | 61.0 | 12.2 | 44  |
| Sequence 40, Appl   | 23 | 4 | US-08-470-339-40   | 61.0 | 12.2 | 45  |
| Sequence 40, Appl   | 23 | 4 | US-08-467-602-40   | 61.0 | 12.2 | 46  |
| Sequence 59, Appl   | 41 | 3 | US-08-938-835A-59  | 61.0 | 12.2 | 47  |
| Sequence 24, Appl   | 40 | 4 | US-09-306-290-24   | 61.0 | 12.2 | 48  |
| Sequence 6, Appl    | 42 | 1 | US-07-847-743B-6   | 61.0 | 12.2 | 49  |
| Sequence 6, Appl    | 42 | 1 | US-08-456-201-6    | 61.0 | 12.2 | 50  |
| Sequence 6, Appl    | 42 | 2 | US-08-330-161-6    | 61.0 | 12.2 | 51  |
| Sequence 6, Appl    | 42 | 2 | US-08-456-241-6    | 61.0 | 12.2 | 52  |
| Sequence 6, Appl    | 42 | 2 | US-08-440-401-6    | 61.0 | 12.2 | 53  |
| Sequence 6, Appl    | 42 | 2 | US-08-419-878B-6   | 61.0 | 12.2 | 54  |
| Sequence 6, Appl    | 42 | 4 | US-09-173-480-6    | 61.0 | 12.2 | 55  |
| Sequence 6, Appl    | 42 | 5 | PCT-US92-04295A-6  | 61.0 | 12.2 | 56  |
| Sequence 59, Appl   | 48 | 3 | US-08-864-473-59   | 61.0 | 12.2 | 57  |
| Sequence 59, Appl   | 48 | 4 | US-09-440-523-59   | 61.0 | 12.2 | 58  |
| Sequence 34, Appl   | 23 | 4 | US-09-641-259B-34  | 60.0 | 12.0 | 59  |
| Sequence 10, Appl   | 29 | 3 | US-08-874-563-10   | 60.0 | 12.0 | 60  |
| Sequence 49, Appl   | 35 | 3 | US-08-300-928C-49  | 60.0 | 12.0 | 61  |
| Sequence 49, Appl   | 35 | 3 | US-08-430-944D-49  | 60.0 | 12.0 | 62  |
| Sequence 49, Appl   | 35 | 3 | US-08-430-014-49   | 60.0 | 12.0 | 63  |
| Sequence 49, Appl   | 35 | 3 | US-08-431-184-49   | 60.0 | 12.0 | 64  |
| Sequence 1, Appl    | 36 | 1 | US-07-862-021B-1   | 60.0 | 12.0 | 65  |
| Sequence 2, Appl    | 36 | 1 | US-07-862-021B-2   | 60.0 | 12.0 | 66  |
| Sequence 4, Appl    | 36 | 1 | US-07-862-021B-4   | 60.0 | 12.0 | 67  |
| Sequence 5, Appl    | 36 | 1 | US-07-862-021B-5   | 60.0 | 12.0 | 68  |
| Sequence 1, Appl    | 36 | 1 | US-08-313-288B-1   | 60.0 | 12.0 | 69  |
| Sequence 2, Appl    | 36 | 1 | US-08-313-288B-2   | 60.0 | 12.0 | 70  |
| Sequence 4, Appl    | 36 | 1 | US-08-313-288B-4   | 60.0 | 12.0 | 71  |
| Sequence 5, Appl    | 36 | 1 | US-08-313-288B-5   | 60.0 | 12.0 | 72  |
| Sequence 1, Appl    | 36 | 5 | PCT-US93-03164-1   | 60.0 | 12.0 | 73  |
| Sequence 2, Appl    | 36 | 5 | PCT-US93-03164-2   | 60.0 | 12.0 | 74  |
| Sequence 4, Appl    | 36 | 5 | PCT-US93-03164-4   | 60.0 | 12.0 | 75  |
| Sequence 5, Appl    | 36 | 5 | PCT-US93-03164-5   | 60.0 | 12.0 | 76  |
| Sequence 12, Appl   | 45 | 4 | US-09-518-914-12   | 60.0 | 12.0 | 77  |
| Sequence 3, Appl    | 47 | 1 | US-07-990-893-3    | 60.0 | 12.0 | 78  |
| Sequence 703, Appl  | 47 | 4 | US-09-641-638-703  | 60.0 | 12.0 | 79  |
| Sequence 1044, Appl | 47 | 4 | US-09-641-638-1044 | 60.0 | 12.0 | 80  |
| Sequence 5, Appl    | 48 | 1 | US-07-734-225A-5   | 60.0 | 12.0 | 81  |
| Sequence 5, Appl    | 48 | 1 | US-07-692-995B-5   | 60.0 | 12.0 | 82  |
| Sequence 5, Appl    | 48 | 1 | US-08-488-457-5    | 60.0 | 12.0 | 83  |
| Sequence 5, Appl    | 48 | 2 | US-08-438-7930-5   | 60.0 | 12.0 | 84  |
| Sequence 5, Appl    | 48 | 2 | US-08-431-459A-5   | 60.0 | 12.0 | 85  |
| Sequence 36, Appl   | 48 | 3 | US-08-338-579A-36  | 60.0 | 12.0 | 86  |
| Sequence 36, Appl   | 48 | 5 | PCT-US94-09851-36  | 60.0 | 12.0 | 87  |
| Sequence 18, Appl   | 49 | 4 | US-09-091-814-18   | 60.0 | 12.0 | 88  |
| Sequence 76, Appl   | 50 | 1 | US-08-171-389-76   | 60.0 | 12.0 | 89  |
| Sequence 76, Appl   | 50 | 1 | US-08-123-936-76   | 60.0 | 12.0 | 90  |
| Sequence 76, Appl   | 50 | 1 | US-08-475-248A-76  | 60.0 | 12.0 | 91  |
| Sequence 76, Appl   | 50 | 3 | US-08-482-080A-76  | 60.0 | 12.0 | 92  |
| Sequence 2, Appl    | 50 | 3 | US-08-950-860-2    | 60.0 | 12.0 | 93  |
| Sequence 13, Appl   | 50 | 4 | US-09-091-814-13   | 60.0 | 12.0 | 94  |
| Sequence 76, Appl   | 50 | 4 | US-09-354-947-76   | 60.0 | 12.0 | 95  |
| Sequence 76, Appl   | 50 | 5 | PCT-US93-12488-76  | 60.0 | 12.0 | 96  |
| Sequence 35, Appl   | 20 | 3 | US-09-226-568-35   | 59.0 | 11.8 | 97  |
| Sequence 147, Appl  | 20 | 4 | US-09-484-617-147  | 59.0 | 11.8 | 98  |
| Sequence 43, Appl   | 21 | 4 | US-07-882-836E-43  | 59.0 | 11.8 | 99  |
| Sequence 21, Appl   | 21 | 4 | US-09-217-490-21   | 59.0 | 11.8 | 100 |















```

977 9.8 49.0 20 1 US-08-424-474-7 Sequence 7, Appl
978 9.8 49.0 20 1 US-08-097-827-13 Sequence 13, Appl
979 9.8 49.0 20 1 US-08-064-167A-77 Sequence 77, Appl
980 9.8 49.0 20 1 US-08-031-399-8 Sequence 8, Appl
981 9.8 49.0 20 1 US-08-243-545-4 Sequence 4, Appl
982 9.8 49.0 20 1 US-08-007-997A-77 Sequence 77, Appl
983 9.8 49.0 20 1 US-08-300-903A-5 Sequence 5, Appl
984 9.8 49.0 20 1 US-08-479-078-609 Sequence 609, App
985 9.8 49.0 20 1 US-08-598-591-43 Sequence 43, Appl
986 9.8 49.0 20 1 US-08-171-718-13 Sequence 13, Appl
987 9.8 49.0 20 1 US-08-504-042-8 Sequence 8, Appl
988 9.8 49.0 20 1 US-08-798-691-47 Sequence 47, Appl
989 9.8 49.0 20 1 US-08-494-574-13 Sequence 13, Appl
990 9.8 49.0 20 1 US-08-580-048-87 Sequence 87, Appl
991 9.8 49.0 20 2 US-08-993-962-4 Sequence 4, Appl
992 9.8 49.0 20 2 US-08-440-740A-77 Sequence 77, Appl
993 9.8 49.0 20 2 US-08-568-459A-24 Sequence 24, Appl
994 9.8 49.0 20 2 US-08-578-551-26 Sequence 26, Appl
995 9.8 49.0 20 2 US-08-444-155C-77 Sequence 77, Appl
996 9.8 49.0 20 2 US-08-640-407-4 Sequence 4, Appl
997 9.8 49.0 20 2 US-08-484-624A-26 Sequence 26, Appl
998 9.8 49.0 20 2 US-08-477-734B-26 Sequence 6, Appl
999 9.8 49.0 20 2 US-08-507-042-6 Sequence 46, Appl
1000 9.8 49.0 20 2 US-08-487-826B-46

```

## ALIGNMENTS

```

RESULT 1
US-09-186-170-11
: Sequence 11, Application US/09186170
: Patent No. 6248558
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhongjia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: V19641
: CURRENT APPLICATION NUMBER: US/09/186,170
: EARLIER FILING DATE: 1998-11-04
: EARLIER FILING DATE: 1998-04-31
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 11
: LENGTH: 24
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURES:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: Sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
: PUBLICATION INFORMATION:
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: Permeability"
: JOURNAL: Nature Biotechnology
: VOLUME: 16
: ISSUE: April
: PAGES: 470-475
: DATE: 1998-04-01
: RELEVANT RESIDUES: 1 to 12
US-09-186-170-11

```

```

Query Match 79.0% Score 15.8; Db 4; Length 24;
Best Local Similarity 89.5%; Pred. No. 61;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
US-09-186-170-11
: Sequence 11, Application US/09186170
: Patent No. 6248558
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhongjia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: V19641
: CURRENT APPLICATION NUMBER: US/09/186,170
: EARLIER FILING DATE: 1998-11-04
: EARLIER FILING DATE: 1998-04-31
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 11
: LENGTH: 27

```

```

US-09-186-170-11
: Sequence 11, Application US/09186170
: Patent No. 6248558
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhongjia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: V19641
: CURRENT APPLICATION NUMBER: US/09/186,170
: EARLIER FILING DATE: 1998-11-04
: EARLIER FILING DATE: 1998-04-31
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 11
: LENGTH: 27

```

```

Db 1 GAGAGGAGGAGGAGGAGG 19
RESULT 2
US-09-562-868-11
: Sequence 11, Application US/09562868
: Patent No. 6432680
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhongjia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: 22000.009702
: CURRENT APPLICATION NUMBER: US/09/562,868
: PRIOR FILING DATE: 2000-05-01
: PRIOR FILING DATE: 1998-04-31
: PRIOR FILING DATE: 1998-04-31
: PRIOR FILING DATE: 1998-11-04
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 11
: LENGTH: 24
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURES:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: Sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
: PUBLICATION INFORMATION:
: AUTHORS: Rojas, M. et al.
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: Permeability"
: JOURNAL: Nature Biotechnology
: VOLUME: 16
: ISSUE: April
: PAGES: 470-475
: DATE: 1998-04-01
US-09-562-868-11

```

```

Query Match 79.0% Score 15.8; Db 4; Length 24;
Best Local Similarity 89.5%; Pred. No. 61;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
US-09-562-868-11
: Sequence 11, Application US/09562868
: Patent No. 6432680
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhongjia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: 22000.009702
: CURRENT APPLICATION NUMBER: US/09/562,868
: PRIOR FILING DATE: 2000-05-01
: PRIOR FILING DATE: 1998-04-31
: PRIOR FILING DATE: 1998-04-31
: PRIOR FILING DATE: 1998-11-04
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 11
: LENGTH: 24
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURES:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: Sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
: PUBLICATION INFORMATION:
: AUTHORS: Rojas, M. et al.
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: Permeability"
: JOURNAL: Nature Biotechnology
: VOLUME: 16
: ISSUE: April
: PAGES: 470-475
: DATE: 1998-04-01
US-09-562-868-11

```

```

Query Match 79.0% Score 15.8; Db 4; Length 24;
Best Local Similarity 89.5%; Pred. No. 61;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
US-09-562-868-11
: Sequence 11, Application US/09562868
: Patent No. 6432680
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhongjia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: V19641
: CURRENT APPLICATION NUMBER: US/09/186,170
: EARLIER FILING DATE: 1998-11-04
: EARLIER FILING DATE: 1998-04-31
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 11
: LENGTH: 27

```

```

1 TYPE: DNA
2 ORGANISM: Artificial Sequence
3 FEATURE:
4 OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
5 OTHER INFORMATION: sequence encoding peptide which transports
6 OTHER INFORMATION: proteins through the cell membrane into the cell
7 PUBLICATION INFORMATION:
8 TITLE: "Genetic Engineering of Proteins with Cell Membrane
9 TITLE: Permeability"
10 JOURNAL: Nature Biotechnology
11 VOLUME: 16
12 ISSUE: April
13 PAGES: 470-475
14 DATE: 1998-04-01
15 RELEVANT RESIDUES: 1 TO 12
US-09-562-868-12

Query Match 79.0% Score 15.8; DB 4; Length 27;
Best Local Similarity 89.5%; Pred. No. 62;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGAGGAGTCTCTCGGCG 19
      ||||| ||||| ||||| ||
Db 1 GGAGGAGTCTCTCGGCG 19

RESULT 4
US-09-562-868-12
1 Sequence 12, Application US/09562868
2 Patent No. 6432680
3 GENERAL INFORMATION:
4 APPLICANT: Lin, Yao-Zhong
5 APPLICANT: Donahue, John P.
6 APPLICANT: Rojas, Mauricio
7 APPLICANT: Tab, Zhongjia
8 TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
9 TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
10 FILE REFERENCE: 2000-09702
11 CURRENT APPLICATION NUMBER: US/09/562-868
12 CURRENT FILING DATE: 2000-05-01
13 PRIOR APPLICATION NUMBER: 60/080,083
14 PRIOR FILING DATE: 1998-03-41
15 PRIOR APPLICATION NUMBER: 09/186,170
16 PRIOR FILING DATE: 1998-11-04
17 NUMBER OF SEQ ID NOS: 18
18 SOFTWARE: Patent In Ver. 2.0
19 SEQ ID NO 12
20 LENGTH: 27
21 TYPE: DNA
22 ORGANISM: Artificial Sequence
23 FEATURE:
24 OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
25 OTHER INFORMATION: sequence encoding peptide which transports
26 OTHER INFORMATION: proteins through the cell membrane into the cell
27 PUBLICATION INFORMATION:
28 AUTHORS: Rojas, M. et al.
29 TITLE: "Genetic Engineering of Proteins with Cell Membrane
30 TITLE: Permeability"
31 JOURNAL: Nature Biotechnology
32 VOLUME: 16
33 ISSUE: April
34 PAGES: 470-475
35 DATE: 1998-04-01
36 RELEVANT RESIDUES: 1 TO 12
US-09-562-868-12

Query Match 79.0% Score 15.8; DB 4; Length 27;
Best Local Similarity 89.5%; Pred. No. 62;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGAGGAGTCTCTCGGCG 19
      ||||| ||||| ||||| ||
Db 1 GGAGGAGTCTCTCGGCG 19

```

```

RESULT 5
US-09-186-170-14
1 Sequence 13, Application US/09186170
2 Patent No. 6244558
3 GENERAL INFORMATION:
4 APPLICANT: Lin, Yao-Zhong
5 APPLICANT: Donahue, John P.
6 APPLICANT: Rojas, Mauricio
7 APPLICANT: Tab, Zhongjia
8 TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
9 TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
10 FILE REFERENCE: V19841
11 CURRENT APPLICATION NUMBER: US/09/186,170
12 CURRENT FILING DATE: 1998-11-04
13 EARLIER APPLICATION NUMBER: 60/080,083
14 EARLIER FILING DATE: 1998-03-41
15 NUMBER OF SEQ ID NOS: 18
16 SOFTWARE: Patent In Ver. 2.0
17 SEQ ID NO 13
18 LENGTH: 30
19 TYPE: DNA
20 ORGANISM: Artificial Sequence
21 FEATURE:
22 OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
23 OTHER INFORMATION: sequence encoding peptide which transports
24 OTHER INFORMATION: proteins through the cell membrane into the cell
25 PUBLICATION INFORMATION:
26 TITLE: "Genetic Engineering of Proteins with Cell Membrane
27 TITLE: Permeability"
28 JOURNAL: Nature Biotechnology
29 VOLUME: 16
30 ISSUE: April
31 PAGES: 470-475
32 DATE: 1998-04-01
33 RELEVANT RESIDUES: 1 TO 12
US-09-186-170-14

Query Match 79.0% Score 15.8; DB 4; Length 40;
Best Local Similarity 89.5%; Pred. No. 63;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGAGGAGTCTCTCGGCG 19
      ||||| ||||| ||||| ||
Db 1 GGAGGAGTCTCTCGGCG 19

RESULT 6
US-09-562-868-13
1 Sequence 13, Application US/09562868
2 Patent No. 6432680
3 GENERAL INFORMATION:
4 APPLICANT: Lin, Yao-Zhong
5 APPLICANT: Donahue, John P.
6 APPLICANT: Rojas, Mauricio
7 APPLICANT: Tab, Zhongjia
8 TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
9 TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
10 FILE REFERENCE: 2000-09702
11 CURRENT APPLICATION NUMBER: US/09/562-868
12 CURRENT FILING DATE: 2000-05-01
13 PRIOR APPLICATION NUMBER: 60/080,083
14 PRIOR FILING DATE: 1998-03-41
15 PRIOR APPLICATION NUMBER: 09/186,170
16 PRIOR FILING DATE: 1998-11-04
17 NUMBER OF SEQ ID NOS: 18
18 SOFTWARE: Patent In Ver. 2.0
19 SEQ ID NO 13
20 LENGTH: 30
21 TYPE: DNA

```

```

: ORGANISM: Artificial Sequence
:
: FEATURE:
:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
:
: PUBLICATION INFORMATION:
:
: AUTHORS: Rojas, M. et al.
:
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: Permeability"
:
: JOURNAL: Nature Biotechnology
:
: VOLUME: 16
:
: ISSUE: April
:
: PAGES: 370-375
:
: DATE: 1998-04-01
:
: RELEVANT RESIDUES: 1 To 12
:
: US-09-186-170-14
:
: Query Match: 79.0%; Score 15.8; DB 4; Length 44;
: Best Local Similarity: 89.5%; Prod. No. 64;
: Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
:
: QY 1 GAGAGATCTCTCTCCGCG 19
: DB 1 GAGAGATCTCTCTCCGCG 19
:
: RESULT 7
:
: US-09-186-170-14
:
: Sequence 14, Application US/09186170
:
: Patent No. 6248558
:
: GENERAL INFORMATION:
:
: APPLICANT: Lin, Yao Zhong
:
: APPLICANT: Donahue, John P.
:
: APPLICANT: Rojas, Mauricio
:
: APPLICANT: Tan, Zhongjia
:
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: Patent No. 6248558
:
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
:
: FILE REFERENCE: V09841
:
: CURRENT APPLICATION NUMBER: US/09/186,170
:
: EARLIER FILING DATE: 1998-11-04
:
: EARLIER APPLICATION NUMBER: 60/080,084
:
: EARLIER FILING DATE: 1998-04-31
:
: NUMBER OF SEQ ID NOS: 18
:
: SOFTWARE: Patent In Vet., 2.0
:
: SEQ ID NO 14
:
: LENGTH: 33
:
: TYPE: DNA
:
: ORGANISM: Artificial Sequence
:
: FEATURE:
:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
:
: PUBLICATION INFORMATION:
:
: AUTHORS: Rojas, M. et al.
:
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: Permeability"
:
: JOURNAL: Nature Biotechnology
:
: VOLUME: 16
:
: ISSUE: April
:
: PAGES: 370-375
:
: DATE: 1998-04-01
:
: RELEVANT RESIDUES: 1 To 12
:
: US-09-186-170-14
:
: Query Match: 79.0%; Score 15.8; DB 4; Length 44;
: Best Local Similarity: 89.5%; Prod. No. 64;
: Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
:
: QY 1 GAGAGATCTCTCTCCGCG 19
: DB 1 GAGAGATCTCTCTCCGCG 19
:
: RESULT 8
:
: US-09-186-170-14
:
: Sequence 14, Application US/09186170
:
: Patent No. 6248558
:
: GENERAL INFORMATION:
:
: APPLICANT: Lin, Yao Zhong
:
: APPLICANT: Donahue, John P.
:
: APPLICANT: Rojas, Mauricio
:
: APPLICANT: Tan, Zhongjia
:
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: Patent No. 6248558
:
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
:
: FILE REFERENCE: V09841
:
: CURRENT APPLICATION NUMBER: US/09/186,170
:
: EARLIER FILING DATE: 1998-11-04
:
: EARLIER APPLICATION NUMBER: 60/080,084
:
: EARLIER FILING DATE: 1998-04-31
:
: NUMBER OF SEQ ID NOS: 18
:
: SOFTWARE: Patent In Vet., 2.0
:
: SEQ ID NO 14
:
: LENGTH: 33
:
: TYPE: DNA
:
: ORGANISM: Artificial Sequence
:
: FEATURE:
:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
:
: PUBLICATION INFORMATION:
:
: AUTHORS: Rojas, M. et al.
:
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: Permeability"
:
: JOURNAL: Nature Biotechnology
:
: VOLUME: 16
:
: ISSUE: April
:
: PAGES: 370-375
:
: DATE: 1998-04-01
:
: RELEVANT RESIDUES: 1 To 12
:
: US-09-186-170-14
:
: Query Match: 79.0%; Score 15.8; DB 4; Length 44;
: Best Local Similarity: 89.5%; Prod. No. 64;
: Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
:
: QY 1 GAGAGATCTCTCTCCGCG 19
: DB 1 GAGAGATCTCTCTCCGCG 19
:
: RESULT 9
:
: US-09-186-170-10
:
: Sequence 10, Application US/09186170
:
: Patent No. 6248558
:
: GENERAL INFORMATION:
:
: APPLICANT: Lin, Yao Zhong
:
: APPLICANT: Donahue, John P.
:
: APPLICANT: Rojas, Mauricio
:
: APPLICANT: Tan, Zhongjia
:
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: Patent No. 6248558
:
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
:
: FILE REFERENCE: V09841
:
: CURRENT APPLICATION NUMBER: US/09/186,170
:
: EARLIER FILING DATE: 1998-11-04
:
: EARLIER APPLICATION NUMBER: 60/080,084
:
: EARLIER FILING DATE: 1998-04-31
:
: NUMBER OF SEQ ID NOS: 18
:
: SOFTWARE: Patent In Vet., 2.0
:
: SEQ ID NO 10
:
: LENGTH: 46
:
: TYPE: DNA
:
: ORGANISM: Artificial Sequence
:
: FEATURE:
:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
:

```

```

: US-09-562-868-14
:
: Sequence 14, Application US/09562868
:
: Patent No. 6442680
:
: GENERAL INFORMATION:
:
: APPLICANT: Lin, Yao Zhong
:
: APPLICANT: Donahue, John P.
:
: APPLICANT: Rojas, Mauricio
:
: APPLICANT: Tan, Zhongjia
:
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: Patent No. 6442680
:
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
:
: FILE REFERENCE: Z2000-009702
:
: CURRENT APPLICATION NUMBER: US/09/562,868
:
: CURRENT FILING DATE: 2000-05-01
:
: PRIOR APPLICATION NUMBER: 60/080,084
:
: PRIOR FILING DATE: 1998-04-31
:
: PRIOR APPLICATION NUMBER: 09/186,170
:
: PRIOR FILING DATE: 1998-11-04
:
: NUMBER OF SEQ ID NOS: 18
:
: SOFTWARE: Patent In Vet., 2.0
:
: SEQ ID NO 14
:
: LENGTH: 33
:
: TYPE: DNA
:
: ORGANISM: Artificial Sequence
:
: FEATURE:
:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
:
: PUBLICATION INFORMATION:
:
: AUTHORS: Rojas, M. et al.
:
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: Permeability"
:
: JOURNAL: Nature Biotechnology
:
: VOLUME: 16
:
: ISSUE: April
:
: PAGES: 370-375
:
: DATE: 1998-04-01
:
: US-09-562-868-14
:
: Query Match: 79.0%; Score 15.8; DB 4; Length 44;
: Best Local Similarity: 89.5%; Prod. No. 64;
: Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
:
: QY 1 GAGAGATCTCTCTCCGCG 19
: DB 1 GAGAGATCTCTCTCCGCG 19
:
: RESULT 9
:
: US-09-186-170-10
:
: Sequence 10, Application US/09186170
:
: Patent No. 6248558
:
: GENERAL INFORMATION:
:
: APPLICANT: Lin, Yao Zhong
:
: APPLICANT: Donahue, John P.
:
: APPLICANT: Rojas, Mauricio
:
: APPLICANT: Tan, Zhongjia
:
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: Patent No. 6248558
:
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
:
: FILE REFERENCE: V09841
:
: CURRENT APPLICATION NUMBER: US/09/186,170
:
: EARLIER FILING DATE: 1998-11-04
:
: EARLIER APPLICATION NUMBER: 60/080,084
:
: EARLIER FILING DATE: 1998-04-31
:
: NUMBER OF SEQ ID NOS: 18
:
: SOFTWARE: Patent In Vet., 2.0
:
: SEQ ID NO 10
:
: LENGTH: 46
:
: TYPE: DNA
:
: ORGANISM: Artificial Sequence
:
: FEATURE:
:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
:

```

: OTHER INFORMATION: Sequence encoding peptide which transports  
 : OTHER INFORMATION: proteins through the cell membrane into the cell  
 : PUBLICATION INFORMATION:  
 : TITLE: "Genetic Engineering of Proteins with Cell Membrane  
 : TITLE: Permeability"  
 : JOURNAL: Nature Biotechnology  
 : VOLUME: 16  
 : ISSUE: April  
 : PAGES: 470-475  
 : DATE: 1998-04-01  
 : RELEVANT RESIDUES: 1 TO 12  
 US-09-166-170-10

Query Match: 79.0%; Score 15.8; DB 4; Length 36;  
 Best Local Similarity: 89.5%; Prod. No. 64;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGAGTCTCTCCG 19  
 DB 1 GAGAGAGTCTCTCCG 19

RESULT 1:  
 US-09-562-868-10  
 : Sequence 10, Application US/09562868  
 : Patent No. 6432680  
 : GENERAL INFORMATION:  
 : APPLICANT: Lin, Yao-Zhong  
 : APPLICANT: Donahue, John P.  
 : APPLICANT: Rojas, Mauricio  
 : APPLICANT: Tan, Zhongjia  
 : TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of  
 : TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"  
 : Patent No. 6432680  
 : FILE REFERENCE: 22000-009702  
 : CURRENT APPLICATION NUMBER: US/09/562,868  
 : PRIOR FILING DATE: 2000-05-01  
 : PRIOR APPLICATION NUMBER: 60/080,083  
 : PRIOR FILING DATE: 1998-03-31  
 : PRIOR APPLICATION NUMBER: 09/186,170  
 : PRIOR FILING DATE: 1998-11-04  
 : NUMBER OF SEQ ID NOS: 18  
 : SOFTWARE: Patent In Ver. 2.0  
 : SEQ ID NO 10  
 : LENGTH: 36  
 : TYPE: DNA  
 : ORGANISM: Artificial Sequence  
 : FEATURE:  
 : OTHER INFORMATION: Description of Artificial Sequence: Nucleotide  
 : OTHER INFORMATION: sequence encoding peptide which transports  
 : OTHER INFORMATION: proteins through the cell membrane into the cell  
 : PUBLICATION INFORMATION:  
 : AUTHOR(S): Rojas, M. et al.  
 : TITLE: "Genetic Engineering of Proteins with Cell Membrane  
 : TITLE: Permeability"  
 : JOURNAL: Nature Biotechnology  
 : VOLUME: 16  
 : ISSUE: April  
 : PAGES: 470-475  
 : DATE: 1998-04-01  
 US-09-562-868-10

Query Match: 79.0%; Score 15.8; DB 4; Length 36;  
 Best Local Similarity: 89.5%; Prod. No. 64;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGAGTCTCTCCG 19  
 DB 1 GAGAGAGTCTCTCCG 19

RESULT 11  
 US-09-487-445-165

: Sequence 165, Application US/09487445  
 : Patent No. 6256600  
 : GENERAL INFORMATION:  
 : APPLICANT: Blood & Harad  
 : APPLICANT: Lee M. Cowart  
 : TITLE OF INVENTION: ANTISENSE MODULATION OF CASPASE 8 EXPRESSION  
 : FILE REFERENCE: KIS-0107  
 : CURRENT APPLICATION NUMBER: US/09/487,445  
 : CURRENT FILING DATE: 2000-01-19  
 : NUMBER OF SEQ ID NOS: 176  
 : SEQ ID NO 165  
 : LENGTH: 20  
 : TYPE: DNA  
 : ORGANISM: Artificial Sequence  
 : FEATURE:  
 : OTHER INFORMATION: Antisense oligonucleotide  
 US-09-487-445-165

Query Match: 69.0%; Score 13.8; DB 4; Length 20;  
 Best Local Similarity: 88.2%; Prod. No. 5,1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCCG 20  
 DB 4 GAGAGTCTCTCCG 20

RESULT 12  
 US-08-648-506-2  
 : Sequence 2, Application US/08648506  
 : Patent No. 6017540  
 : GENERAL INFORMATION:  
 : APPLICANT: BRIDGER, Robert F.  
 : APPLICANT: KIES, Arto K.  
 : TITLE OF INVENTION: PHOSPHOLIPASES IN ANIMAL FEED  
 : FILE REFERENCE: 246152007400  
 : CURRENT APPLICATION NUMBER: US/08/648,506  
 : CURRENT FILING DATE: 1995-05-15  
 : EARLIER APPLICATION NUMBER: EPO 95201266.4  
 : EARLIER FILING DATE: 1995-05-15  
 : EARLIER APPLICATION NUMBER: EPO 95202442.0  
 : EARLIER FILING DATE: 1995-08-08  
 : NUMBER OF SEQ ID NOS: 4  
 : SOFTWARE: Patent In Ver. 2.0  
 : SEQ ID NO 2  
 : LENGTH: 39  
 : TYPE: DNA  
 : ORGANISM: mammalian  
 US-08-648-506-2

Query Match: 66.0%; Score 13.2; DB 3; Length 39;  
 Best Local Similarity: 83.3%; Prod. No. 1e+03;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CAGAGAGTCTCTCCG 19  
 DB 20 CAGAGAGTCTCTCCG 37

RESULT 13  
 US-09-277-455-2  
 : Sequence 2, Application US/09277455  
 : Patent No. 6184749  
 : GENERAL INFORMATION:  
 : APPLICANT: BRIDGER, Robert F.  
 : APPLICANT: KIES, Arto K.  
 : TITLE OF INVENTION: PHOSPHOLIPASES IN ANIMAL FEED  
 : FILE REFERENCE: 246152007400  
 : CURRENT APPLICATION NUMBER: US/09/277,455  
 : CURRENT FILING DATE: 1999-03-26  
 : PRIOR APPLICATION NUMBER: 08/648,506  
 : PRIOR FILING DATE: 1995-05-15  
 : PRIOR APPLICATION NUMBER: EPO 95202442.0



QY 1 GAGAGAGTCTTC 18  
11 TTTTTTTTTT 11  
Db 21 GAGAGAGTCTTC 44

RESULT 16  
US-08-505-250-42  
? Sequence 42, Application US/08505250  
? Patent No. 6183983  
? GENERAL INFORMATION:  
? APPLICANT: Sato, Haruya  
? APPLICANT: Yamamoto, Keiji  
? APPLICANT: Suzuki, Kokiichi  
? APPLICANT: Ikeda, Masahiro  
? APPLICANT: Sakatani, Masahiro  
? APPLICANT: Taniguchi, Makoto  
? TITLE OF INVENTION: PROTEIN MODIFICATION METHOD  
? FILE REFERENCE: 110-511  
? CURRENT APPLICATION NUMBER: US/08/505,250  
? PRIOR FILING DATE: 1995-11-29  
? EARLIER APPLICATION NUMBER: PCT/JP95/00298  
? EARLIER FILING DATE: 1995-02-27  
? EARLIER APPLICATION NUMBER: JP 198187/94  
? EARLIER FILING DATE: 1994-08-23  
? NUMBER OF SEQ ID NOS: 53  
? SOFTWARE: Patent In Ver. 2.0  
? SEQ ID NO 42  
? LENGTH: 48  
? TYPE: DNA  
? ORGANISM: Artificial Sequence  
? FEATURE:  
? OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
? OTHER INFORMATION: DNA fragment  
US-08-505-250-32

Query Match 65.0%; Score 13; DB 4; Length 48;  
Best Local Similarity 100.0%; Pred. No. 1.3e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGAGAGTCTTC 13  
11 TTTTTTTTTT 11  
Db 21 GAGAGAGTCTTC 44

RESULT 17  
US-08-505-250-42  
? Sequence 42, Application US/08505250  
? Patent No. 6183983  
? GENERAL INFORMATION:  
? APPLICANT: Sato, Haruya  
? APPLICANT: Yamamoto, Keiji  
? APPLICANT: Suzuki, Kokiichi  
? APPLICANT: Ikeda, Masahiro  
? APPLICANT: Sakatani, Masahiro  
? APPLICANT: Taniguchi, Makoto  
? TITLE OF INVENTION: PROTEIN MODIFICATION METHOD  
? FILE REFERENCE: 110-511  
? CURRENT APPLICATION NUMBER: US/08/505,250  
? PRIOR FILING DATE: 1995-11-29  
? PRIOR APPLICATION NUMBER: PCT/JP95/00298  
? PRIOR FILING DATE: 1995-02-27  
? PRIOR APPLICATION NUMBER: JP 198187/94  
? PRIOR FILING DATE: 1994-08-23  
? NUMBER OF SEQ ID NOS: 54  
? SOFTWARE: Patent In Ver. 2.0  
? SEQ ID NO 42  
? LENGTH: 48  
? TYPE: DNA  
? ORGANISM: Artificial Sequence  
? FEATURE:  
? OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
? OTHER INFORMATION: DNA fragment

US-08-505-250-52

Query Match 65.0%; Score 13; DB 4; Length 48;  
Best Local Similarity 100.0%; Pred. No. 1.3e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGAGAGTCTTC 14  
11 TTTTTTTTTT 11  
Db 21 GAGAGAGTCTTC 44

RESULT 18  
US-08-505-250-52/c  
? Sequence 44, Application US/08505250  
? Patent No. 6183983  
? GENERAL INFORMATION:  
? APPLICANT: Sato, Haruya  
? APPLICANT: Yamamoto, Keiji  
? APPLICANT: Suzuki, Kokiichi  
? APPLICANT: Ikeda, Masahiro  
? APPLICANT: Sakatani, Masahiro  
? APPLICANT: Taniguchi, Makoto  
? TITLE OF INVENTION: PROTEIN MODIFICATION METHOD  
? FILE REFERENCE: 110-511  
? CURRENT APPLICATION NUMBER: US/08/505,250  
? PRIOR FILING DATE: 1995-11-29  
? EARLIER APPLICATION NUMBER: PCT/JP95/00298  
? EARLIER FILING DATE: 1995-02-27  
? EARLIER APPLICATION NUMBER: JP 198187/94  
? EARLIER FILING DATE: 1994-08-23  
? NUMBER OF SEQ ID NOS: 53  
? SOFTWARE: Patent In Ver. 2.0  
? SEQ ID NO 44  
? LENGTH: 40  
? TYPE: DNA  
? ORGANISM: Artificial Sequence  
? FEATURE:  
? OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
? OTHER INFORMATION: DNA fragment  
US-08-505-250-33

Query Match 65.0%; Score 13; DB 4; Length 40;  
Best Local Similarity 100.0%; Pred. No. 1.3e+03;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGAGAGTCTTC 13  
11 TTTTTTTTTT 11  
Db 21 GAGAGAGTCTTC 10

RESULT 19  
US-08-505-250-52/c  
? Sequence 52, Application US/08505250  
? Patent No. 6183983  
? GENERAL INFORMATION:  
? APPLICANT: Sato, Haruya  
? APPLICANT: Yamamoto, Keiji  
? APPLICANT: Suzuki, Kokiichi  
? APPLICANT: Ikeda, Masahiro  
? APPLICANT: Sakatani, Masahiro  
? APPLICANT: Taniguchi, Makoto  
? TITLE OF INVENTION: PROTEIN MODIFICATION METHOD  
? FILE REFERENCE: 110-511  
? CURRENT APPLICATION NUMBER: US/08/505,250  
? PRIOR FILING DATE: 1995-11-29  
? PRIOR APPLICATION NUMBER: PCT/JP95/00298  
? PRIOR FILING DATE: 1995-02-27  
? PRIOR APPLICATION NUMBER: JP 198187/94  
? PRIOR FILING DATE: 1994-08-23  
? NUMBER OF SEQ ID NOS: 53  
? SOFTWARE: Patent In Ver. 2.0  
? SEQ ID NO 52  
? LENGTH: 40

```

: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: synthetic
: OTHER INFORMATION: DNA Truament
US-08 505,250 52

```

```

Query Match: 65.0%; Score 13; DB 4; Length 40;
Best Local Similarity: 100.0%; Prod. No. 1,40004;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 GAGAGAGCTTTC 13
    111111111111
DB 22 GAGAGAGCTTTC 10

```

```

RESULT 20
US-08 505,250 44/c
: Sequence 44; Application US/08505250
: Patent No. 6,422,996
: GENERAL INFORMATION:

```

```

: APPLICANT: Sato, Baruya
: APPLICANT: Yamamoto, Keiji
: APPLICANT: Suzuki, Kokiichi
: APPLICANT: Ikeda, Masahiro
: APPLICANT: Sakadami, Masahiro
: APPLICANT: Taniguchi, Makoto
: TITLE OF INVENTION: PROTEIN MODIFICATION METHOD
: FILE REFERENCE: 110-511
: CURRENT APPLICATION NUMBER: US/08/505,250
: PRIOR FILING DATE: 1995-11-29
: PRIOR APPLICATION NUMBER: PCT/JP95/00298
: PRIOR FILING DATE: 1995-02-27
: PRIOR APPLICATION NUMBER: JP 198187/94
: PRIOR FILING DATE: 1994-08-23
: NUMBER OF SEQ ID NOS: 53
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 44
: LENGTH: 40
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: synthetic
: OTHER INFORMATION: DNA Truament
US-08 505,250 44

```

```

Query Match: 65.0%; Score 13; DB 4; Length 40;
Best Local Similarity: 100.0%; Prod. No. 1,40004;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 GAGAGAGCTTTC 13
    111111111111
DB 22 GAGAGAGCTTTC 10

```

```

RESULT 21
US-08 505,250 52/c
: Sequence 52; Application US/08505250
: Patent No. 6,422,996
: GENERAL INFORMATION:

```

```

: APPLICANT: Sato, Baruya
: APPLICANT: Yamamoto, Keiji
: APPLICANT: Suzuki, Kokiichi
: APPLICANT: Ikeda, Masahiro
: APPLICANT: Sakadami, Masahiro
: APPLICANT: Taniguchi, Makoto
: TITLE OF INVENTION: PROTEIN MODIFICATION METHOD
: FILE REFERENCE: 110-511
: CURRENT APPLICATION NUMBER: US/08/505,250
: PRIOR FILING DATE: 1995-11-29
: PRIOR APPLICATION NUMBER: PCT/JP95/00298
: PRIOR FILING DATE: 1995-02-27
: PRIOR APPLICATION NUMBER: JP 198187/94

```

```

: PRIOR FILING DATE: 1994-08-23
: NUMBER OF SEQ ID NOS: 53
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 42
: LENGTH: 40
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: synthetic
: OTHER INFORMATION: DNA Truament
US-08 505,250 52

```

```

Query Match: 65.0%; Score 13; DB 4; Length 40;
Best Local Similarity: 100.0%; Prod. No. 1,40004;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 GAGAGAGCTTTC 13
    111111111111
DB 22 GAGAGAGCTTTC 10

```

```

RESULT 22
US-08 505,250 51
: Sequence 51; Application US/08505250
: Patent No. 6,422,996
: GENERAL INFORMATION:
: APPLICANT: Sato, Baruya
: APPLICANT: Yamamoto, Keiji
: APPLICANT: Suzuki, Kokiichi
: APPLICANT: Ikeda, Masahiro
: APPLICANT: Sakadami, Masahiro
: APPLICANT: Taniguchi, Makoto
: TITLE OF INVENTION: PROTEIN MODIFICATION METHOD
: FILE REFERENCE: 110-511
: CURRENT APPLICATION NUMBER: US/08/505,250
: PRIOR FILING DATE: 1995-11-29
: PRIOR APPLICATION NUMBER: PCT/JP95/00298
: PRIOR FILING DATE: 1995-02-27
: PRIOR APPLICATION NUMBER: JP 198187/94
: PRIOR FILING DATE: 1994-08-23
: NUMBER OF SEQ ID NOS: 53
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 51
: LENGTH: 42
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: synthetic
: OTHER INFORMATION: DNA Truament
US-08 505,250 51

```

```

Query Match: 65.0%; Score 13; DB 4; Length 42;
Best Local Similarity: 100.0%; Prod. No. 1,40004;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 GAGAGAGCTTTC 13
    111111111111
DB 21 GAGAGAGCTTTC 43

```

```

RESULT 23
US-08 505,250 51
: Sequence 51; Application US/08505250
: Patent No. 6,422,996
: GENERAL INFORMATION:

```

```

: APPLICANT: Sato, Baruya
: APPLICANT: Yamamoto, Keiji
: APPLICANT: Suzuki, Kokiichi
: APPLICANT: Ikeda, Masahiro
: APPLICANT: Sakadami, Masahiro
: APPLICANT: Taniguchi, Makoto
: TITLE OF INVENTION: PROTEIN MODIFICATION METHOD
: FILE REFERENCE: 110-511

```



```

: CURRENT APPLICATION NUMBER: US/09/505,250
: CURRENT FILING DATE: 1995-11-29
: PRIOR APPLICATION NUMBER: PCT/JP95/00298
: PRIOR FILING DATE: 1995-02-27
: PRIOR APPLICATION NUMBER: JP 198187/94
: PRIOR FILING DATE: 1994-08-24
: NUMBER OF SEQ ID NOS: 54
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 51
: LENGTH: 42
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: synthetic
: OTHER INFORMATION: DNA treatment
US-09-505-250-51

```

```

Query Match: 65.0%; Score 14; DB 4; Length 42;
Best Local Similarity: 100.0%; Pred. No. 1.6e+04;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 GAGACAGTCTTC 14
    111111111111
DB 21 GAGACAGTCTTC 43

```

```

RESULT 24
US-09-186-170-18
: Sequence 18; Application US/09/186-170
: Patent No. 6,448,558
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhong-Jia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: Patent No. 6,448,558
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: V19841
: CURRENT APPLICATION NUMBER: US/09/186,170
: CURRENT FILING DATE: 1998-11-04
: EARLIER APPLICATION NUMBER: 60/080,084
: EARLIER FILING DATE: 1998-04-31
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 18
: LENGTH: 43
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
: PUBLICATION INFORMATION:
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: "Permeability"
: JOURNAL: Nature Biotechnology
: VOLUME: 16
: ISSUE: April
: PAGES: 470-475
: DATE: 1998-04-01
: RELEVANT RESIDUES: 1 To 12
US-09-186-170-18

```

```

Query Match: 64.0%; Score 12.8; DB 4; Length 43;
Best Local Similarity: 87.5%; Pred. No. 1.6e+04;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 4 GAGATCTCTCTGGG 19
    111111111111
DB 1 GAGATCTCTCTGGG 16

```

```

RESULT 25
US-09-562-868-18
: Sequence 18; Application US/09/562,868
: Patent No. 6,442,680
: GENERAL INFORMATION:
: APPLICANT: Lin, Yao-Zhong
: APPLICANT: Bonahue, John P.
: APPLICANT: Rojas, Mauricio
: APPLICANT: Tan, Zhong-Jia
: TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of
: Patent No. 6,442,680
: TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
: FILE REFERENCE: 22000.009702
: CURRENT APPLICATION NUMBER: US/09/562,868
: CURRENT FILING DATE: 2000-05-01
: PRIOR APPLICATION NUMBER: 60/080,084
: PRIOR FILING DATE: 1998-04-31
: PRIOR APPLICATION NUMBER: 09/186,170
: PRIOR FILING DATE: 1998-11-04
: NUMBER OF SEQ ID NOS: 18
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 18
: LENGTH: 44
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
: OTHER INFORMATION: sequence encoding peptide which transports
: OTHER INFORMATION: proteins through the cell membrane into the cell
: PUBLICATION INFORMATION:
: AUTHORS: Rojas, M. et al.
: TITLE: "Genetic Engineering of Proteins with Cell Membrane
: TITLE: "Permeability"
: JOURNAL: Nature Biotechnology
: VOLUME: 16
: ISSUE: April
: PAGES: 470-475
: DATE: 1998-04-01
: US-09-562-868-18

```

```

Query Match: 64.0%; Score 12.8; DB 4; Length 44;
Best Local Similarity: 87.5%; Pred. No. 1.6e+04;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 4 GATCTCTCTCTGGG 19
    111111111111
DB 1 GATCTCTCTCTGGG 16

```

```

Search completed: March 19, 2003, 12:09:09
Job time : 42.597 secs

```



# Mathematical models of infectious diseases

Run on: March 18, 2003, 11:26:36 ; Search time 33.1148 Seconds  
(without alignments)  
423 899 Million cellulates/Sec

[illegible]

Perfect source: 20  
Sequence: 1 degree after effect of 20

[illegible]

**Sequences:** 501302 seeds, 450932545 residues

Total number of hits satisfying chosen parameters:

|         |     |     |            |
|---------|-----|-----|------------|
| Minimum | 103 | seq | length: 0  |
| Maximum | 103 | seq | length: 50 |

|                  |               |      |
|------------------|---------------|------|
| Post-processing: | Minimum Match | 0%   |
|                  | Maximum Match | 100% |
|                  | Listing first | 1000 |

Database : Published Applications NA: \*

|     |  |
|-----|--|
| 1:  | /cnn2_6/pdat/a/2/pubpna/US07_NEW_PUB_seq.*   |
| 2:  | /cnn2_6/pdat/a/2/pubpna/US11_NEW_PUB_seq.*   |
| 3:  | /cnn2_6/pdat/a/2/pubpna/US06_NEW_PUB_seq.*   |
| 4:  | /cnn2_6/pdat/a/2/pubpna/US06_PUB03_MB_seq.*  |
| 5:  | /cnn2_6/pdat/a/2/pubpna/US07_NEW_PUB_seq.*   |
| 6:  | /cnn2_6/pdat/a/2/pubpna/PCT08_PUB03_MB_seq.* |
| 7:  | /cnn2_6/pdat/a/2/pubpna/US08_NEW_PUB_seq.*   |
| 8:  | /cnn2_6/pdat/a/2/pubpna/US08_PUB03_MB_seq.*  |
| 9:  | /cnn2_6/pdat/a/2/pubpna/US09_NEW_PUB_seq.*   |
| 10: | /cnn2_6/pdat/a/2/pubpna/US04_PUB03_MB_seq.*  |
| 11: | /cnn2_6/pdat/a/2/pubpna/US10_NEW_PUB_seq.*   |
| 12: | /cnn2_6/pdat/a/2/pubpna/US10_PUB03_MB_seq.*  |
| 13: | /cnn2_6/pdat/a/2/pubpna/US06_NEW_PUB_seq.*   |
| 14: | /cnn2_6/pdat/a/2/pubpna/US06_PUB03_MB_seq.*  |

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARY

| Result No. | Score | Query |    | Length | ID                 | Description       |
|------------|-------|-------|----|--------|--------------------|-------------------|
|            |       | Match | %  |        |                    |                   |
| 1          | 15.8  | 79.0  | 24 | 12     | US-10-116-288-11   | Sequence 11, Appl |
| 2          | 15.8  | 79.0  | 27 | 12     | US-10-116-288-12   | Sequence 12, Appl |
| 3          | 15.8  | 79.0  | 30 | 12     | US-10-116-288-13   | Sequence 13, Appl |
| 4          | 15.8  | 79.0  | 33 | 12     | US-10-116-288-14   | Sequence 14, Appl |
| 5          | 15.8  | 79.0  | 36 | 12     | US-10-116-288-15   | Sequence 15, Appl |
| 6          | 13.8  | 69.0  | 24 | 19     | US-09-900-527-5    | Sequence 5, Appl  |
| 7          | 12.8  | 64.0  | 20 | 9      | US-09-804-717A-26  | Sequence 26, Appl |
| 8          | 12.8  | 64.0  | 33 | 12     | US-10-116-288-18   | Sequence 18, Appl |
| 9          | 12.8  | 63.0  | 45 | 10     | US-09-742-201-6    | Sequence 6, Appl  |
| 10         | 12.6  | 63.0  | 28 | 9      | US-10-114-893-241  | Sequence 241, App |
| 11         | 12.6  | 63.0  | 45 | 9      | US-09-978-295A-50  | Sequence 50, Appl |
| 12         | 12.6  | 63.0  | 45 | 9      | US-09-978-607-50   | Sequence 50, Appl |
| 13         | 12.6  | 63.0  | 45 | 9      | US-09-978-192A-50  | Sequence 50, Appl |
| 14         | 12.6  | 63.0  | 45 | 9      | US-09-949-832A-50  | Sequence 50, Appl |
| 15         | 12.6  | 63.0  | 45 | 9      | US-09-978-189-50   | Sequence 50, Appl |
| 16         | 12.6  | 63.0  | 45 | 9      | US-09-978-608A-50  | Sequence 50, Appl |
| 17         | 12.6  | 63.0  | 47 | 9      | US-09-853-526-410  | Sequence 410, App |
| 18         | 12.6  | 63.0  | 47 | 10     | US-09-901-184A-410 | Sequence 410, App |
| 19         | 12.4  | 62.0  | 31 | 10     | US-09-801-274-442  | Sequence 442, App |













|       |     |      |    |    |                    |                    |       |     |      |    |    |                     |                   |
|-------|-----|------|----|----|--------------------|--------------------|-------|-----|------|----|----|---------------------|-------------------|
| c 824 | 9.4 | 47.0 | 18 | 9  | US-09-961-077-1223 | Sequence 1223, Ap  | c 896 | 9.4 | 47.0 | 21 | 9  | US-10-066-269-147   | Sequence 147, App |
| c 825 | 9.4 | 47.0 | 18 | 9  | US-09-988-626-53   | Sequence 53, Appl  | c 897 | 9.4 | 47.0 | 21 | 9  | US-09-779-152-98    | Sequence 98, Appl |
| c 826 | 9.4 | 47.0 | 18 | 9  | US-09-988-687-54   | Sequence 54, Appl  | c 898 | 9.4 | 47.0 | 21 | 9  | US-09-779-152-100   | Sequence 100, App |
| c 827 | 9.4 | 47.0 | 18 | 10 | US-09-126-945B-15  | Sequence 15, Appl  | c 899 | 9.4 | 47.0 | 21 | 9  | US-09-902-903-386   | Sequence 386, App |
| c 828 | 9.4 | 47.0 | 18 | 10 | US-09-280-030-23   | Sequence 23, Appl  | c 900 | 9.4 | 47.0 | 21 | 9  | US-09-903-749A-386  | Sequence 386, App |
| c 829 | 9.4 | 47.0 | 18 | 10 | US-09-969-373-1755 | Sequence 1755, Ap  | c 901 | 9.4 | 47.0 | 21 | 9  | US-09-903-786-386   | Sequence 386, App |
| c 830 | 9.4 | 47.0 | 18 | 10 | US-09-969-373-1756 | Sequence 1756, Ap  | c 902 | 9.4 | 47.0 | 21 | 9  | US-10-066-193-147   | Sequence 147, App |
| c 831 | 9.4 | 47.0 | 18 | 10 | US-09-969-373-1759 | Sequence 1759, Ap  | c 903 | 9.4 | 47.0 | 21 | 9  | US-10-066-211-147   | Sequence 147, App |
| c 832 | 9.4 | 47.0 | 19 | 9  | US-09-905-291A-335 | Sequence 335, App  | c 904 | 9.4 | 47.0 | 21 | 10 | US-09-871-809-2     | Sequence 2, Appl  |
| c 833 | 9.4 | 47.0 | 19 | 9  | US-09-902-853-335  | Sequence 335, App  | c 905 | 9.4 | 47.0 | 21 | 10 | US-09-734-188-34    | Sequence 34, Appl |
| c 834 | 9.4 | 47.0 | 19 | 9  | US-09-907-824-335  | Sequence 335, App  | c 906 | 9.4 | 47.0 | 21 | 10 | US-09-909-320-386   | Sequence 386, App |
| c 835 | 9.4 | 47.0 | 19 | 9  | US-09-907-841-335  | Sequence 335, App  | c 907 | 9.4 | 47.0 | 21 | 10 | US-09-895-382-24    | Sequence 24, Appl |
| c 836 | 9.4 | 47.0 | 19 | 9  | US-09-904-611-335  | Sequence 335, App  | c 908 | 9.4 | 47.0 | 21 | 10 | US-09-909-088B-386  | Sequence 386, App |
| c 837 | 9.4 | 47.0 | 19 | 9  | US-09-906-742-335  | Sequence 335, App  | c 909 | 9.4 | 47.0 | 21 | 10 | US-09-733-444-5     | Sequence 5, Appl  |
| c 838 | 9.4 | 47.0 | 19 | 9  | US-09-906-838-335  | Sequence 335, App  | c 910 | 9.4 | 47.0 | 21 | 12 | US-10-052-817-17    | Sequence 17, Appl |
| c 839 | 9.4 | 47.0 | 19 | 9  | US-09-907-613-335  | Sequence 335, App  | c 911 | 9.4 | 47.0 | 22 | 9  | US-09-989-420-34    | Sequence 34, Appl |
| c 840 | 9.4 | 47.0 | 19 | 9  | US-09-907-942-335  | Sequence 335, App  | c 912 | 9.4 | 47.0 | 22 | 10 | US-09-952-663-8     | Sequence 8, Appl  |
| c 841 | 9.4 | 47.0 | 19 | 9  | US-09-904-820-335  | Sequence 335, App  | c 913 | 9.4 | 47.0 | 23 | 10 | US-09-918-568-15    | Sequence 15, Appl |
| c 842 | 9.4 | 47.0 | 19 | 9  | US-09-904-859-335  | Sequence 335, App  | c 914 | 9.4 | 47.0 | 24 | 9  | US-09-952-598-331   | Sequence 331, App |
| c 843 | 9.4 | 47.0 | 19 | 9  | US-09-909-204-335  | Sequence 335, App  | c 915 | 9.4 | 47.0 | 24 | 9  | US-09-989-243A-331  | Sequence 331, App |
| c 844 | 9.4 | 47.0 | 19 | 9  | US-09-904-786-335  | Sequence 335, App  | c 916 | 9.4 | 47.0 | 24 | 9  | US-09-989-735-331   | Sequence 331, App |
| c 845 | 9.4 | 47.0 | 19 | 9  | US-09-906-646-335  | Sequence 335, App  | c 917 | 9.4 | 47.0 | 24 | 9  | US-09-990-444-331   | Sequence 331, App |
| c 846 | 9.4 | 47.0 | 19 | 9  | US-09-906-700-335  | Sequence 335, App  | c 918 | 9.4 | 47.0 | 24 | 9  | US-09-989-730-331   | Sequence 331, App |
| c 847 | 9.4 | 47.0 | 19 | 9  | US-09-902-903-335  | Sequence 335, App  | c 919 | 9.4 | 47.0 | 24 | 9  | US-09-990-436-331   | Sequence 331, App |
| c 848 | 9.4 | 47.0 | 19 | 9  | US-09-903-749A-335 | Sequence 335, App  | c 920 | 9.4 | 47.0 | 24 | 9  | US-09-991-181-331   | Sequence 331, App |
| c 849 | 9.4 | 47.0 | 19 | 10 | US-09-903-786-335  | Sequence 335, App  | c 921 | 9.4 | 47.0 | 24 | 9  | US-09-989-734-331   | Sequence 331, App |
| c 850 | 9.4 | 47.0 | 19 | 10 | US-09-910-087-12   | Sequence 12, Appl  | c 922 | 9.4 | 47.0 | 24 | 9  | US-09-993-687-331   | Sequence 331, App |
| c 851 | 9.4 | 47.0 | 19 | 10 | US-09-925-548-3    | Sequence 3, Appl   | c 923 | 9.4 | 47.0 | 24 | 9  | US-09-997-653-331   | Sequence 331, App |
| c 852 | 9.4 | 47.0 | 19 | 10 | US-09-909-320-335  | Sequence 335, App  | c 924 | 9.4 | 47.0 | 24 | 9  | US-09-993-667-331   | Sequence 331, App |
| c 853 | 9.4 | 47.0 | 19 | 10 | US-09-969-373-2246 | Sequence 2236, Ap  | c 925 | 9.4 | 47.0 | 24 | 9  | US-09-990-438-331   | Sequence 331, App |
| c 854 | 9.4 | 47.0 | 19 | 10 | US-09-909-088B-335 | Sequence 335, App  | c 926 | 9.4 | 47.0 | 24 | 9  | US-09-990-562-331   | Sequence 331, App |
| c 855 | 9.4 | 47.0 | 20 | 7  | US-08-911-824-35   | Sequence 35, Appl  | c 927 | 9.4 | 47.0 | 24 | 9  | US-09-997-428-331   | Sequence 331, App |
| c 856 | 9.4 | 47.0 | 20 | 9  | US-10-104-774-8    | Sequence 8, Appl   | c 928 | 9.4 | 47.0 | 24 | 9  | US-09-997-666-331   | Sequence 331, App |
| c 857 | 9.4 | 47.0 | 20 | 9  | US-09-881-012-226  | Sequence 226, App  | c 929 | 9.4 | 47.0 | 24 | 9  | US-09-990-711-331   | Sequence 331, App |
| c 858 | 9.4 | 47.0 | 20 | 10 | US-09-018-125-6    | Sequence 6, Appl   | c 930 | 9.4 | 47.0 | 24 | 9  | US-10-195-142-25    | Sequence 25, Appl |
| c 859 | 9.4 | 47.0 | 20 | 10 | US-09-756-910-11   | Sequence 10, Appl  | c 931 | 9.4 | 47.0 | 24 | 9  | US-09-989-726-331   | Sequence 331, App |
| c 860 | 9.4 | 47.0 | 20 | 10 | US-09-756-910-11   | Sequence 11, Appl  | c 932 | 9.4 | 47.0 | 24 | 9  | US-10-116-821-6     | Sequence 6, Appl  |
| c 861 | 9.4 | 47.0 | 20 | 10 | US-09-758-881-3    | Sequence 3, Appl   | c 933 | 9.4 | 47.0 | 24 | 9  | US-09-990-438-331   | Sequence 331, App |
| c 862 | 9.4 | 47.0 | 20 | 10 | US-09-759-984-6    | Sequence 6, Appl   | c 934 | 9.4 | 47.0 | 24 | 9  | US-09-998-156-331   | Sequence 331, App |
| c 863 | 9.4 | 47.0 | 20 | 10 | US-09-854-883-153  | Sequence 153, App  | c 935 | 9.4 | 47.0 | 24 | 10 | US-09-216-393-190   | Sequence 190, App |
| c 864 | 9.4 | 47.0 | 20 | 10 | US-09-834-050-5    | Sequence 5, Appl   | c 936 | 9.4 | 47.0 | 24 | 10 | US-09-822-263-29    | Sequence 29, Appl |
| c 865 | 9.4 | 47.0 | 20 | 10 | US-09-814-986-55   | Sequence 55, Appl  | c 937 | 9.4 | 47.0 | 24 | 10 | US-09-989-723-331   | Sequence 331, App |
| c 866 | 9.4 | 47.0 | 21 | 8  | US-08-987-689A-11  | Sequence 11, Appl  | c 938 | 9.4 | 47.0 | 24 | 10 | US-09-989-279-331   | Sequence 331, App |
| c 867 | 9.4 | 47.0 | 21 | 8  | US-08-987-689A-23  | Sequence 23, Appl  | c 939 | 9.4 | 47.0 | 24 | 10 | US-09-989-727-331   | Sequence 331, App |
| c 868 | 9.4 | 47.0 | 21 | 9  | US-09-905-291A-386 | Sequence 386, App  | c 940 | 9.4 | 47.0 | 24 | 10 | US-09-989-731-331   | Sequence 331, App |
| c 869 | 9.4 | 47.0 | 21 | 9  | US-09-258-031B-8   | Sequence 8, Appl   | c 941 | 9.4 | 47.0 | 24 | 10 | US-09-945-247-13    | Sequence 13, Appl |
| c 870 | 9.4 | 47.0 | 21 | 9  | US-10-078-808-8    | Sequence 8, Appl   | c 942 | 9.4 | 47.0 | 24 | 10 | US-09-989-732-331   | Sequence 331, App |
| c 871 | 9.4 | 47.0 | 21 | 9  | US-09-874-503-26   | Sequence 26, Appl  | c 943 | 9.4 | 47.0 | 24 | 10 | US-09-991-073-331   | Sequence 331, App |
| c 872 | 9.4 | 47.0 | 21 | 9  | US-10-066-500-147  | Sequence 147, App  | c 944 | 9.4 | 47.0 | 24 | 10 | US-09-990-456-331   | Sequence 331, App |
| c 873 | 9.4 | 47.0 | 21 | 9  | US-10-066-157-26   | Sequence 26, Appl  | c 945 | 9.4 | 47.0 | 24 | 10 | US-09-991-163-331   | Sequence 331, App |
| c 874 | 9.4 | 47.0 | 21 | 9  | US-09-902-853-386  | Sequence 386, App  | c 946 | 9.4 | 47.0 | 24 | 10 | US-09-815-153-19    | Sequence 19, Appl |
| c 875 | 9.4 | 47.0 | 21 | 9  | US-09-907-824-386  | Sequence 386, App  | c 947 | 9.4 | 47.0 | 24 | 10 | US-09-993-604-331   | Sequence 331, App |
| c 876 | 9.4 | 47.0 | 21 | 9  | US-09-907-841-386  | Sequence 386, App  | c 948 | 9.4 | 47.0 | 24 | 10 | US-09-745-008-11    | Sequence 11, Appl |
| c 877 | 9.4 | 47.0 | 21 | 9  | US-09-904-011-386  | Sequence 386, App  | c 949 | 9.4 | 47.0 | 24 | 10 | US-09-989-721-331   | Sequence 331, App |
| c 878 | 9.4 | 47.0 | 21 | 9  | US-09-747-259-26   | Sequence 26, Appl  | c 950 | 9.4 | 47.0 | 24 | 10 | US-09-989-721-331   | Sequence 331, App |
| c 879 | 9.4 | 47.0 | 21 | 9  | US-09-906-742-386  | Sequence 386, App  | c 951 | 9.4 | 47.0 | 24 | 10 | US-09-169-048-17    | Sequence 17, Appl |
| c 880 | 9.4 | 47.0 | 21 | 9  | US-10-023-610-98   | Sequence 98, Appl  | c 952 | 9.4 | 47.0 | 24 | 10 | US-09-995-515-23    | Sequence 23, Appl |
| c 881 | 9.4 | 47.0 | 21 | 9  | US-10-023-610-100  | Sequence 100, Appl | c 953 | 9.4 | 47.0 | 25 | 9  | US-09-847-101B-25   | Sequence 25, Appl |
| c 882 | 9.4 | 47.0 | 21 | 9  | US-09-906-838-386  | Sequence 386, App  | c 954 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-2744 | Sequence 2744, Ap |
| c 883 | 9.4 | 47.0 | 21 | 9  | US-09-907-613-386  | Sequence 386, App  | c 955 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-2745 | Sequence 2745, Ap |
| c 884 | 9.4 | 47.0 | 21 | 9  | US-09-907-942-386  | Sequence 386, App  | c 956 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-2746 | Sequence 2746, Ap |
| c 885 | 9.4 | 47.0 | 21 | 9  | US-09-932-300-97   | Sequence 97, Appl  | c 957 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-2747 | Sequence 2747, Ap |
| c 886 | 9.4 | 47.0 | 21 | 9  | US-10-002-796-147  | Sequence 147, App  | c 958 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-2748 | Sequence 2748, Ap |
| c 887 | 9.4 | 47.0 | 21 | 9  | US-10-066-273-147  | Sequence 147, App  | c 959 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-2749 | Sequence 2749, Ap |
| c 888 | 9.4 | 47.0 | 21 | 9  | US-10-066-494-147  | Sequence 147, App  | c 960 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-2750 | Sequence 2750, Ap |
| c 889 | 9.4 | 47.0 | 21 | 9  | US-10-104-755-66   | Sequence 66, Appl  | c 961 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-3439 | Sequence 3439, Ap |
| c 890 | 9.4 | 47.0 | 21 | 9  | US-09-904-820-386  | Sequence 386, App  | c 962 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-3440 | Sequence 3440, Ap |
| c 891 | 9.4 | 47.0 | 21 | 9  | US-09-904-859-386  | Sequence 386, App  | c 963 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-3441 | Sequence 3441, Ap |
| c 892 | 9.4 | 47.0 | 21 | 9  | US-09-909-204-386  | Sequence 386, App  | c 964 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-3442 | Sequence 3442, Ap |
| c 893 | 9.4 | 47.0 | 21 | 9  | US-09-904-786-386  | Sequence 386, App  | c 965 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-3443 | Sequence 3443, Ap |
| c 894 | 9.4 | 47.0 | 21 | 9  | US-09-906-646-386  | Sequence 386, App  | c 966 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-3444 | Sequence 3444, Ap |
| c 895 | 9.4 | 47.0 | 21 | 9  | US-09-906-700-386  | Sequence 386, App  | c 967 | 9.4 | 47.0 | 25 | 9  | US-10-060-756A-3445 | Sequence 3445, Ap |



1 TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of  
2 TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"  
3 FILE REFERENCE: 22000.009704  
4 CURRENT APPLICATION NUMBER: US/10/116,288  
5 CURRENT FILING DATE: 2002-04-04  
6 PRIOR APPLICATION NUMBER: 09/562,868  
7 PRIOR FILING DATE: 2000-05-01  
8 PRIOR APPLICATION NUMBER: 09/186,170  
9 PRIOR FILING DATE: 1998-11-04  
10 PRIOR APPLICATION NUMBER: 60/080,083  
11 PRIOR FILING DATE: 1998-04-31  
12 NUMBER OF SEQ ID NOS: 18  
13 SOFTWARE: Patent In Ver. 2.0  
14 SEQ ID NO 14  
15 LENGTH: 36  
16 TYPE: DNA  
17 ORGANISM: Artificial Sequence  
18 FEATURE:  
19 OTHER INFORMATION: Description of Artificial Sequence: Nucleotide  
20 OTHER INFORMATION: sequence encoding peptide which transports  
21 OTHER INFORMATION: proteins through the cell membrane into the cell  
22 PUBLICATION INFORMATION:  
23 AUTHORS: Rojas, M. et al.  
24 TITLE: "Genetic Engineering of Proteins with Cell Membrane  
25 TITLE: Permeability"  
26 JOURNAL: Nature Biotechnology  
27 VOLUME: 16  
28 ISSUE: April  
29 PAGES: 470-475  
30 DATE: 1998-04-01  
31 US-10-116-288-14

Query Match 79.0% Score 15.8; db 12; Length 30;  
Best Local Similarity 89.5% Pred. No. 1,4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGAGGAGTCTCTCTGGTG 19  
db 1 GGAGGAGTCTCTCTGGTG 19

RESULT 4  
US-10-116-288-14  
1 Sequence 14, Application US/10/116288  
2 Patent No. US20020143142A1  
3 GENERAL INFORMATION:  
4 APPLICANT: Lin, Yao-Zhong  
5 APPLICANT: Donahue, John P.  
6 APPLICANT: Rojas, Manrieto  
7 APPLICANT: Tan, Zhongjia  
8 TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of  
9 TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"  
10 FILE REFERENCE: 22000.009704  
11 CURRENT APPLICATION NUMBER: US/10/116,288  
12 CURRENT FILING DATE: 2002-04-04  
13 PRIOR APPLICATION NUMBER: 09/562,868  
14 PRIOR FILING DATE: 2000-05-01  
15 PRIOR APPLICATION NUMBER: 09/186,170  
16 PRIOR FILING DATE: 1998-11-04  
17 PRIOR APPLICATION NUMBER: 60/080,083  
18 PRIOR FILING DATE: 1998-04-31  
19 NUMBER OF SEQ ID NOS: 18  
20 SOFTWARE: Patent In Ver. 2.0  
21 SEQ ID NO 14  
22 LENGTH: 36  
23 TYPE: DNA  
24 ORGANISM: Artificial Sequence  
25 FEATURE:  
26 OTHER INFORMATION: Description of Artificial Sequence: Nucleotide  
27 OTHER INFORMATION: sequence encoding peptide which transports  
28 OTHER INFORMATION: proteins through the cell membrane into the cell  
29 PUBLICATION INFORMATION:  
30 AUTHORS: Rojas, M. et al.

1 TITLE: "Genetic Engineering of Proteins with Cell Membrane  
2 TITLE: Permeability"  
3 JOURNAL: Nature Biotechnology  
4 VOLUME: 16  
5 ISSUE: April  
6 PAGES: 470-475  
7 DATE: 1998-04-01  
8 US-10-116-288-14

Query Match 79.0% Score 15.8; db 12; Length 33;  
Best Local Similarity 89.5% Pred. No. 1,4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGAGGAGTCTCTCTGGTG 19  
db 1 GGAGGAGTCTCTCTGGTG 19

RESULT 5  
US-10-116-288-10  
1 Sequence 10, Application US/10/116288  
2 Patent No. US20020143142A1  
3 GENERAL INFORMATION:  
4 APPLICANT: Lin, Yao-Zhong  
5 APPLICANT: Donahue, John P.  
6 APPLICANT: Rojas, Manrieto  
7 APPLICANT: Tan, Zhongjia  
8 TITLE OF INVENTION: "Sequence and Method for Genetic Engineering of  
9 TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"  
10 FILE REFERENCE: 22000.009704  
11 CURRENT APPLICATION NUMBER: US/10/116,288  
12 CURRENT FILING DATE: 2002-04-04  
13 PRIOR APPLICATION NUMBER: 09/562,868  
14 PRIOR FILING DATE: 2000-05-01  
15 PRIOR APPLICATION NUMBER: 09/186,170  
16 PRIOR FILING DATE: 1998-11-04  
17 PRIOR APPLICATION NUMBER: 60/080,083  
18 PRIOR FILING DATE: 1998-04-31  
19 NUMBER OF SEQ ID NOS: 18  
20 SOFTWARE: Patent In Ver. 2.0  
21 SEQ ID NO 10  
22 LENGTH: 36  
23 TYPE: DNA  
24 ORGANISM: Artificial Sequence  
25 FEATURE:  
26 OTHER INFORMATION: Description of Artificial Sequence: Nucleotide  
27 OTHER INFORMATION: sequence encoding peptide which transports  
28 OTHER INFORMATION: proteins through the cell membrane into the cell  
29 PUBLICATION INFORMATION:  
30 AUTHORS: Rojas, M. et al.  
31 TITLE: "Genetic Engineering of Proteins with Cell Membrane  
32 TITLE: Permeability"  
33 JOURNAL: Nature Biotechnology  
34 VOLUME: 16  
35 ISSUE: April  
36 PAGES: 470-475  
37 DATE: 1998-04-01  
38 US-10-116-288-10

Query Match 79.0% Score 15.8; db 12; Length 46;  
Best Local Similarity 89.5% Pred. No. 1,4e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGAGGAGTCTCTCTGGTG 19  
db 1 GGAGGAGTCTCTCTGGTG 19

RESULT 6  
US-09-900-527-5  
1 Sequence 5, Application US/09/000527  
2 Patent No. US 20151066A1  
3 GENERAL INFORMATION:

```

1 APPLICANT: Rubenstein, John L.
2 APPLICANT: Mione, Maria
3 APPLICANT: Anderson, Stewart
4 APPLICANT: Stuchmer, Thorsten
5 APPLICANT: Yoo, Kyoun
6 TITLE OF INVENTION: Production of Gabaretic Cells
7 FILE REFERENCE: USPTO 4
8 CURRENT APPLICATION NUMBER: US/09/900,527
9 CURRENT FILING DATE: 2001-07-05
10 PRIOR APPLICATION NUMBER: US 60/218,221
11 PRIOR FILING DATE: 2001-07-14
12 NUMBER OF SEQ ID NOS: 8
13 SOFTWARE: FastSeq for Windows Version 4.0
14 SEQ ID NO 5
15 LENGTH: 24
16 TYPE: DNA
17 ORGANISM: Artificial Sequence
18 FEATURE:
19 OTHER INFORMATION: mouse primer corresponding to part of mouse Dlx2
US 09 900 527 5

```

```

Query Match 64.0% Score 14.8; DB 10; Length 24;
Best Local Similarity 88.2% Pred. No. 1,2e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1 GAAAGATTCTTCG 17
1111111111111111
DB 2 GAAAGATTCTTCG 18

```

```

RESULT 7
US 09 804 717A 26/6
1 Sequence 26, Application US/09804717A
2 Patent No. US20020164311A1
3 GENERAL INFORMATION:
4 APPLICANT: Strom, Terry B.
5 TITLE OF INVENTION: METHODS AND COMPOUNDS FOR PREVENTION OF GRAFT REJECTION
6 FILE REFERENCE: 01948-051004
7 CURRENT APPLICATION NUMBER: US/09/804,717A
8 CURRENT FILING DATE: 2002-04-25
9 PRIOR APPLICATION NUMBER: US 09/604,765
10 PRIOR FILING DATE: 1999-05-04
11 PRIOR APPLICATION NUMBER: US 08/274,402
12 PRIOR FILING DATE: 1994-07-11
13 PRIOR APPLICATION NUMBER: US 08/024,669
14 PRIOR FILING DATE: 1993-03-01
15 PRIOR APPLICATION NUMBER: US 07/843,741
16 PRIOR FILING DATE: 1992-02-28
17 NUMBER OF SEQ ID NOS: 46
18 SOFTWARE: FastSeq for Windows Version 4.0
19 SEQ ID NO 26
20 LENGTH: 20
21 TYPE: DNA
22 ORGANISM: Homo sapiens
US 09 804 717A 26

```

```

Query Match 64.0% Score 12.8; DB 9; Length 20;
Best Local Similarity 87.5% Pred. No. 3,4e+03;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1 GAAAGATTCTTCG 16
1111111111111111
DB 20 GAAAGATTCTTCG 5

```

```

RESULT 8
US 10 116 288 18
1 Sequence 18, Application US/10116288
2 Patent No. US20020143142A1
3 GENERAL INFORMATION:
4 APPLICANT: Lin, Yao Zhong
5 APPLICANT: Dondos, John P.

```

```

1 APPLICANT: Rojas, Mustelo
2 APPLICANT: Lim, Zhong
3 TITLE OF INVENTION: "Sequence and Method for Gene for Endocytosis of
4 TITLE OF INVENTION: Proteins with Cell Membrane Translocating Activity"
5 FILE REFERENCE: 22000,009703
6 CURRENT APPLICATION NUMBER: US/10/116,288
7 CURRENT FILING DATE: 2002-04-04
8 PRIOR APPLICATION NUMBER: 09/952,868
9 PRIOR FILING DATE: 2000-09-01
10 PRIOR APPLICATION NUMBER: 09/186,170
11 PRIOR FILING DATE: 1998-11-04
12 PRIOR APPLICATION NUMBER: 60/080,083
13 PRIOR FILING DATE: 1998-03-31
14 NUMBER OF SEQ ID NOS: 18
15 SOFTWARE: Patent In Vcr. 2.0
16 SEQ ID NO 18
17 LENGTH: 43
18 TYPE: DNA
19 ORGANISM: Artificial Sequence
20 FEATURE:
21 OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
22 OTHER INFORMATION: sequence encoding peptide which transmits
23 OTHER INFORMATION: proteins through the cell membrane into the cell
24 PUBLICATION INFORMATION:
25 AUTHORS: Rojas, M. et al.
26 TITLE: "Gene for Endocytosis of Proteins with Cell Membrane
27 JOURNAL: Nature Biotechnology
28 VOLUME: 16
29 ISSUE: April
30 PAGES: 470-475
31 DATE: 1998-04-01
32 US 10 116 288 18

```

```

Query Match 64.0% Score 12.8; DB 12; Length 43;
Best Local Similarity 87.5% Pred. No. 3,5e+03;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 4 GAAATTCTTCG 19
1111111111111111
DB 1 GAAATTCTTCG 16

```

```

RESULT 9
US 09 742 201 6/6
1 Sequence 6, Application US/09742201
2 Patent No. US20020124091A1
3 GENERAL INFORMATION:
4 APPLICANT: Gurley, Austin L.
5 APPLICANT: Kitchener, Daniel K.
6 APPLICANT: Wood, William L.
7 TITLE OF INVENTION: No. US20020124091A1 Inhibition of Reproductive Growth Factor Ac
8 TITLE OF INVENTION: for Use in Modulation of Androgenesis and Cardiovascular
9 FILE REFERENCE: 09048103
10 CURRENT APPLICATION NUMBER: US/09/742,201
11 CURRENT FILING DATE: 2000-12-19
12 PRIOR APPLICATION NUMBER: PCT/US00/03565
13 PRIOR FILING DATE: 2000-02-11
14 PRIOR APPLICATION NUMBER: PCT/US00/06884
15 PRIOR FILING DATE: 2000-04-15
16 PRIOR APPLICATION NUMBER: US 60/255,665
17 PRIOR FILING DATE: 2000-11-28
18 NUMBER OF SEQ ID NOS: 6
19 SEQ ID NO 6
20 LENGTH: 45
21 TYPE: DNA
22 ORGANISM: Artificial Sequence
23 FEATURE:
24 OTHER INFORMATION: hybridization probe
US 09 742 201 6

```

```

Query Match 64.0% Score 12.8; DB 10; Length 45;
Best Local Similarity 87.5% Pred. No. 3,6e+03;

```

Matches 14: Conservative 0: Mismatches 2: Indels 0: Gaps 0:

QY 5 CAGAGTCTCTGGGG 20

Db 45 CAGAGTCTCTGGGG 40

#### RESULT 10

US-10-114-894-241/c  
 : Sequence 241: Application US/10114894  
 : Publication No. US20020194567A1  
 : GENERAL INFORMATION:  
 : APPLICANT: Jacobs, Kenneth  
 : APPLICANT: McCoy, John M.  
 : APPLICANT: McVallie, Edward R.  
 : APPLICANT: Collins-Kachle, Lisa A.  
 : APPLICANT: Evans, Cheryl  
 : APPLICANT: Merbert, David  
 : APPLICANT: Treacy, Maurice  
 : APPLICANT: Bowman, Michael R.  
 : APPLICANT: Spaulding, Vikki  
 : APPLICANT: Carlin-Duckett, McKeonath  
 : APPLICANT: Kelleher, Kerry S.  
 : APPLICANT: Genetics Institute, Inc.  
 : TITLE OF INVENTION: SECRETED PROTEINS AND POLYPEPTIDES ENCODING THEM  
 : FILE REFERENCE: GI 6000-10A  
 : CURRENT APPLICATION NUMBER: US/10/114,894  
 : CURRENT FILING DATE: 2002-04-02  
 : EARLIER APPLICATION NUMBER: 09/414,242  
 : EARLIER FILING DATE: 1999-10-06  
 : NUMBER OF SEQ ID NOS: 421  
 : SOFTWARE: PatentIn Ver. 2.0  
 : SEQ ID NO 241  
 : LENGTH: 28  
 : TYPE: DNA  
 : ORGANISM: Artificial Sequence  
 : FEATURES:  
 : OTHER INFORMATION: oligonucleotide  
 US-10-114-894-241

Query Match 63.0% Score 12.63 18 9; Length 28;

Best Local Similarity 78.9% Pred. No. 4.4e+03;

Matches 15: Conservative 0: Mismatches 4: Indels 0: Gaps 0:

QY 1 CAGAGTCTCTGGGG 19

Db 21 CAGAGTCTCTGGGG 4

#### RESULT 11

US-09-978-295A-50/c  
 : Sequence 50: Application US/09978295A  
 : Patent No. US20020156006A1  
 : GENERAL INFORMATION:  
 : APPLICANT: Ashkenazi, Avi  
 : APPLICANT: Baker Kevin P.  
 : APPLICANT: Beststein, David  
 : APPLICANT: Desnoyers, Luc  
 : APPLICANT: Eaton, Dan  
 : APPLICANT: Ferrara, Napoleon  
 : APPLICANT: Filvaroff, Ellen  
 : APPLICANT: Fond, Sherman  
 : APPLICANT: Gao, Wei-qiang  
 : APPLICANT: Gerber, Hanspeter  
 : APPLICANT: Gottfredson, Mary E.  
 : APPLICANT: Goddard, Andrew  
 : APPLICANT: Godowski, Paul J.  
 : APPLICANT: Grimaldi, J. Christopher  
 : APPLICANT: Gurney, Austin L.  
 : APPLICANT: Hillan, Kenneth J.  
 : APPLICANT: Kijavits, Ivar J.  
 : APPLICANT: Kuo, Sophia S.  
 : APPLICANT: Napier, Mary A.

APPLICANT: Pan, James;  
 APPLICANT: Paoletti, Nicholas F.  
 APPLICANT: Roy, Margaret Ann  
 APPLICANT: Shelton, David L.  
 APPLICANT: Stewart, Timothy A.  
 APPLICANT: Thomas, Daniel  
 APPLICANT: Williams, P. Mickey  
 APPLICANT: Wood, William L.  
 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 FILE REFERENCE: P26,001,011  
 CURRENT APPLICATION NUMBER: US/09/978,295A  
 CURRENT FILING DATE: 2001-10-15  
 PRIOR APPLICATION NUMBER: 09/918585  
 PRIOR FILING DATE: 2001-07-30  
 PRIOR APPLICATION NUMBER: 60/062,250  
 PRIOR FILING DATE: 1997-10-17  
 PRIOR APPLICATION NUMBER: 60/064,249  
 PRIOR FILING DATE: 1997-11-03  
 PRIOR APPLICATION NUMBER: 60/065,411  
 PRIOR FILING DATE: 1997-11-13  
 PRIOR APPLICATION NUMBER: 60/066,464  
 PRIOR FILING DATE: 1997-11-21  
 PRIOR APPLICATION NUMBER: 60/077,450  
 PRIOR FILING DATE: 1998-03-10  
 PRIOR APPLICATION NUMBER: 60/077,642  
 PRIOR FILING DATE: 1998-03-11  
 PRIOR APPLICATION NUMBER: 60/077,641  
 PRIOR FILING DATE: 1998-03-11  
 PRIOR APPLICATION NUMBER: 60/077,649  
 PRIOR FILING DATE: 1998-03-11  
 PRIOR APPLICATION NUMBER: 60/077,791  
 PRIOR FILING DATE: 1998-03-12  
 PRIOR APPLICATION NUMBER: 60/078,004  
 PRIOR FILING DATE: 1998-03-13  
 PRIOR APPLICATION NUMBER: 60/078,886  
 PRIOR FILING DATE: 1998-03-20  
 PRIOR APPLICATION NUMBER: 60/078,936  
 PRIOR FILING DATE: 1998-03-20  
 PRIOR APPLICATION NUMBER: 60/078,940  
 PRIOR FILING DATE: 1998-03-20  
 PRIOR APPLICATION NUMBER: 60/078,939  
 PRIOR FILING DATE: 1998-03-20  
 PRIOR APPLICATION NUMBER: 60/079,294  
 PRIOR FILING DATE: 1998-03-25  
 PRIOR APPLICATION NUMBER: 60/079,656  
 PRIOR FILING DATE: 1998-03-26  
 PRIOR APPLICATION NUMBER: 60/079,664  
 PRIOR FILING DATE: 1998-03-27  
 PRIOR APPLICATION NUMBER: 60/079,689  
 PRIOR FILING DATE: 1998-03-27  
 PRIOR APPLICATION NUMBER: 60/079,663  
 PRIOR FILING DATE: 1998-03-27  
 PRIOR APPLICATION NUMBER: 60/079,728  
 PRIOR FILING DATE: 1998-03-27  
 PRIOR APPLICATION NUMBER: 60/079,786  
 PRIOR FILING DATE: 1998-03-27  
 PRIOR APPLICATION NUMBER: 60/079,920  
 PRIOR FILING DATE: 1998-03-30  
 PRIOR APPLICATION NUMBER: 60/079,923  
 PRIOR FILING DATE: 1998-03-30  
 PRIOR APPLICATION NUMBER: 60/080,105  
 PRIOR FILING DATE: 1998-03-31  
 PRIOR APPLICATION NUMBER: 60/080,107  
 PRIOR FILING DATE: 1998-03-31  
 PRIOR APPLICATION NUMBER: 60/080,145  
 PRIOR FILING DATE: 1998-03-31  
 PRIOR APPLICATION NUMBER: 60/080,194  
 PRIOR FILING DATE: 1998-03-31  
 PRIOR APPLICATION NUMBER: 60/080,427  
 PRIOR FILING DATE: 1999-04-01  
 PRIOR APPLICATION NUMBER: 60/080,428  
 PRIOR FILING DATE: 1999-04-01

1 PRIOR APPLICATION NUMBER: 60/080434  
 2 PRIOR FILING DATE: 1998-04-01  
 3 PRIOR APPLICATION NUMBER: 60/080434  
 4 PRIOR FILING DATE: 1998-04-01  
 5 PRIOR APPLICATION NUMBER: 60/081070  
 6 PRIOR FILING DATE: 1998-04-08  
 7 PRIOR APPLICATION NUMBER: 60/081049  
 8 PRIOR FILING DATE: 1998-04-08  
 9 PRIOR APPLICATION NUMBER: 60/081071  
 10 PRIOR FILING DATE: 1998-04-08  
 11 PRIOR APPLICATION NUMBER: 60/081195  
 12 PRIOR FILING DATE: 1998-04-08  
 13 PRIOR APPLICATION NUMBER: 60/081204  
 14 PRIOR FILING DATE: 1998-04-09  
 15 PRIOR APPLICATION NUMBER: 60/081229  
 16 PRIOR FILING DATE: 1998-04-09  
 17 PRIOR APPLICATION NUMBER: 60/081955  
 18 PRIOR FILING DATE: 1998-04-15  
 19 PRIOR APPLICATION NUMBER: 60/081817  
 20 PRIOR FILING DATE: 1998-04-15  
 21 PRIOR APPLICATION NUMBER: 60/081819  
 22 PRIOR FILING DATE: 1998-04-15  
 23 PRIOR APPLICATION NUMBER: 60/081952  
 24 PRIOR FILING DATE: 1998-04-15  
 25 PRIOR APPLICATION NUMBER: 60/081848  
 26 PRIOR FILING DATE: 1998-04-15  
 27 PRIOR APPLICATION NUMBER: 60/082568  
 28 PRIOR FILING DATE: 1998-04-21  
 29 PRIOR APPLICATION NUMBER: 60/082569  
 30 PRIOR FILING DATE: 1998-04-21  
 31 PRIOR APPLICATION NUMBER: 60/082704  
 32 PRIOR FILING DATE: 1998-04-22  
 33 PRIOR APPLICATION NUMBER: 60/082804  
 34 PRIOR FILING DATE: 1998-04-22  
 35 PRIOR APPLICATION NUMBER: 60/082700  
 36 PRIOR FILING DATE: 1998-04-22  
 37 PRIOR APPLICATION NUMBER: 60/082797  
 38 PRIOR FILING DATE: 1998-04-22  
 39 PRIOR APPLICATION NUMBER: 60/082796  
 40 PRIOR FILING DATE: 1998-04-23  
 41 PRIOR APPLICATION NUMBER: 60/084466  
 42 PRIOR FILING DATE: 1998-04-29  
 43 PRIOR APPLICATION NUMBER: 60/084462  
 44 PRIOR FILING DATE: 1998-04-29  
 45 PRIOR APPLICATION NUMBER: 60/084499  
 46 PRIOR FILING DATE: 1998-04-29  
 47 PRIOR APPLICATION NUMBER: 60/083545  
 48 PRIOR FILING DATE: 1998-04-29  
 49 PRIOR APPLICATION NUMBER: 60/084554  
 50 PRIOR FILING DATE: 1998-04-29  
 51 PRIOR APPLICATION NUMBER: 60/084558  
 52 PRIOR FILING DATE: 1998-04-29  
 53 PRIOR APPLICATION NUMBER: 60/083559  
 54 PRIOR FILING DATE: 1998-04-29  
 55 PRIOR APPLICATION NUMBER: 60/084500  
 56 PRIOR FILING DATE: 1998-04-29  
 57 PRIOR APPLICATION NUMBER: 60/084742  
 58 PRIOR FILING DATE: 1998-04-30  
 59 PRIOR APPLICATION NUMBER: 60/084466  
 60 PRIOR FILING DATE: 1998-05-05  
 61 PRIOR APPLICATION NUMBER: 60/084414  
 62 PRIOR FILING DATE: 1998-05-06  
 63 PRIOR APPLICATION NUMBER: 60/084441  
 64 PRIOR FILING DATE: 1998-05-06  
 65 PRIOR APPLICATION NUMBER: 60/084647  
 66 PRIOR FILING DATE: 1998-05-07  
 67 PRIOR APPLICATION NUMBER: 60/084649

1 PRIOR FILING DATE: 1998-05-07  
 2 PRIOR APPLICATION NUMBER: 60/084640  
 3 PRIOR FILING DATE: 1998-05-07  
 4 PRIOR APPLICATION NUMBER: 60/084598  
 5 PRIOR FILING DATE: 1998-05-07  
 6 PRIOR APPLICATION NUMBER: 60/084600  
 7 PRIOR FILING DATE: 1998-05-07  
 8 PRIOR APPLICATION NUMBER: 60/084627  
 9 PRIOR FILING DATE: 1998-05-07  
 10 PRIOR APPLICATION NUMBER: 60/084644  
 11 PRIOR FILING DATE: 1998-05-07  
 12 PRIOR APPLICATION NUMBER: 60/085439  
 13 PRIOR FILING DATE: 1998-05-14  
 14 PRIOR APPLICATION NUMBER: 60/085438  
 15 PRIOR FILING DATE: 1998-05-14  
 16 PRIOR APPLICATION NUMBER: 60/085424  
 17 PRIOR FILING DATE: 1998-05-14  
 18 PRIOR APPLICATION NUMBER: 60/085582  
 19 PRIOR FILING DATE: 1998-05-15  
 20 PRIOR APPLICATION NUMBER: 60/085700  
 21 PRIOR FILING DATE: 1998-05-15  
 22 PRIOR APPLICATION NUMBER: 60/085689  
 23 PRIOR FILING DATE: 1998-05-15  
 24 PRIOR APPLICATION NUMBER: 60/085579  
 25 PRIOR FILING DATE: 1998-05-15  
 26 PRIOR APPLICATION NUMBER: 60/085580  
 27 PRIOR FILING DATE: 1998-05-15  
 28 PRIOR APPLICATION NUMBER: 60/085574  
 29 PRIOR FILING DATE: 1998-05-15  
 30 PRIOR APPLICATION NUMBER: 60/085704  
 31 PRIOR FILING DATE: 1998-05-15  
 32 PRIOR APPLICATION NUMBER: 60/085697

Query Match: 64.0%; Score: 12.6; 18.9; Length: 45;  
 Best Local Similarity: 78.9%; Pred. No. 4.5+0.4;  
 Matches: 15; Conservative: 0; Mismatches: 4; Indels: 0; Gaps: 0;

QY 1 05ACAGATTTTCCTGGG 19  
 11111111111111111111  
 10 35 05ACAGATTTTCCTGGG 17

RESULT 12  
 US 09 978 697 60/c  
 1 Sequence 60, Application US/0997869/  
 2 Patent No. US20020169284A1  
 3 GENERAL INFORMATION:  
 4 APPLICANT: Ashkenazi, Avi  
 5 APPLICANT: Baker, Kevin P.  
 6 APPLICANT: Bolstein, David  
 7 APPLICANT: Desnoyers, Laure  
 8 APPLICANT: Patton, Dan  
 9 APPLICANT: Ferrara, Napoleon  
 10 APPLICANT: Filvaroli, Ellen  
 11 APPLICANT: Fong, Sherman  
 12 APPLICANT: Gao, Wei Ghang  
 13 APPLICANT: Gerber, Hanspeter  
 14 APPLICANT: Gottlieb, Mary E.  
 15 APPLICANT: Gaddard, Audrey  
 16 APPLICANT: Godowski, Paul J.  
 17 APPLICANT: Grimaldi, J. Christopher  
 18 APPLICANT: Gurney, Austin L.  
 19 APPLICANT: Hillan, Kenneth J.  
 20 APPLICANT: Klayman, Ivan J.  
 21 APPLICANT: Kuo, Sophia S.  
 22 APPLICANT: Napier, Mary A.  
 23 APPLICANT: Pan, James  
 24 APPLICANT: Pami, Nicholas P.  
 25 APPLICANT: Roy, Margaret Ann  
 26 APPLICANT: Shelton, David L.  
 27 APPLICANT: Stewart, Timothy A.  
 28 APPLICANT: Thomas, Daniel  
 29 APPLICANT: Williams, T. Mickey

APPLICANT: Wood, William L.  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P26301027  
CURRENT APPLICATION NUMBER: US/09/978,697  
PRIOR FILING DATE: 2001-10-16  
PRIOR APPLICATION NUMBER: 09/918585  
PRIOR FILING DATE: 2001-07-30  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/064249  
PRIOR FILING DATE: 1997-11-03  
PRIOR APPLICATION NUMBER: 60/065311  
PRIOR FILING DATE: 1997-11-13  
PRIOR APPLICATION NUMBER: 60/066364  
PRIOR FILING DATE: 1997-11-21  
PRIOR APPLICATION NUMBER: 60/077450  
PRIOR FILING DATE: 1998-03-10  
PRIOR APPLICATION NUMBER: 60/077642  
PRIOR FILING DATE: 1998-03-11  
PRIOR APPLICATION NUMBER: 60/077641  
PRIOR FILING DATE: 1998-03-11  
PRIOR APPLICATION NUMBER: 60/077649  
PRIOR FILING DATE: 1998-03-11  
PRIOR APPLICATION NUMBER: 60/077791  
PRIOR FILING DATE: 1998-03-12  
PRIOR APPLICATION NUMBER: 60/078004  
PRIOR FILING DATE: 1998-03-13  
PRIOR APPLICATION NUMBER: 60/078886  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/078936  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/078910  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/078939  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/079294  
PRIOR FILING DATE: 1998-03-25  
PRIOR APPLICATION NUMBER: 60/079656  
PRIOR FILING DATE: 1998-03-26  
PRIOR APPLICATION NUMBER: 60/079664  
PRIOR FILING DATE: 1998-03-27  
PRIOR APPLICATION NUMBER: 60/079689  
PRIOR FILING DATE: 1998-03-27  
PRIOR APPLICATION NUMBER: 60/079663  
PRIOR FILING DATE: 1998-03-27  
PRIOR APPLICATION NUMBER: 60/079728  
PRIOR FILING DATE: 1998-03-27  
PRIOR APPLICATION NUMBER: 60/079786  
PRIOR FILING DATE: 1998-03-27  
PRIOR APPLICATION NUMBER: 60/079920  
PRIOR FILING DATE: 1998-03-30  
PRIOR APPLICATION NUMBER: 60/079923  
PRIOR FILING DATE: 1998-03-30  
PRIOR APPLICATION NUMBER: 60/080105  
PRIOR FILING DATE: 1998-03-31  
PRIOR APPLICATION NUMBER: 60/080194  
PRIOR FILING DATE: 1998-03-31  
PRIOR APPLICATION NUMBER: 60/080327  
PRIOR FILING DATE: 1998-03-31  
PRIOR APPLICATION NUMBER: 60/080328  
PRIOR FILING DATE: 1998-03-31  
PRIOR APPLICATION NUMBER: 60/080333  
PRIOR FILING DATE: 1998-04-01  
PRIOR APPLICATION NUMBER: 60/080334  
PRIOR FILING DATE: 1998-04-01  
PRIOR APPLICATION NUMBER: 60/081070  
PRIOR FILING DATE: 1998-04-08  
PRIOR APPLICATION NUMBER: 60/081049  
PRIOR FILING DATE: 1998-04-08  
PRIOR APPLICATION NUMBER: 60/081071  
PRIOR FILING DATE: 1998-04-08  
PRIOR APPLICATION NUMBER: 60/081195  
PRIOR FILING DATE: 1998-04-08  
PRIOR APPLICATION NUMBER: 60/081203  
PRIOR FILING DATE: 1998-04-09  
PRIOR APPLICATION NUMBER: 60/081229  
PRIOR FILING DATE: 1998-04-09  
PRIOR APPLICATION NUMBER: 60/081955  
PRIOR FILING DATE: 1998-04-15  
PRIOR APPLICATION NUMBER: 60/081817  
PRIOR FILING DATE: 1998-04-15  
PRIOR APPLICATION NUMBER: 60/081819  
PRIOR FILING DATE: 1998-04-15  
PRIOR APPLICATION NUMBER: 60/081952  
PRIOR FILING DATE: 1998-04-15  
PRIOR APPLICATION NUMBER: 60/081838  
PRIOR FILING DATE: 1998-04-15  
PRIOR APPLICATION NUMBER: 60/082568  
PRIOR FILING DATE: 1998-04-21  
PRIOR APPLICATION NUMBER: 60/082569  
PRIOR FILING DATE: 1998-04-21  
PRIOR APPLICATION NUMBER: 60/082704  
PRIOR FILING DATE: 1998-04-22  
PRIOR APPLICATION NUMBER: 60/082804  
PRIOR FILING DATE: 1998-04-22  
PRIOR APPLICATION NUMBER: 60/082700  
PRIOR FILING DATE: 1998-04-22  
PRIOR APPLICATION NUMBER: 60/082797  
PRIOR FILING DATE: 1998-04-22  
PRIOR APPLICATION NUMBER: 60/082796  
PRIOR FILING DATE: 1998-04-23  
PRIOR APPLICATION NUMBER: 60/083336  
PRIOR FILING DATE: 1998-04-27  
PRIOR APPLICATION NUMBER: 60/083322  
PRIOR FILING DATE: 1998-04-28  
PRIOR APPLICATION NUMBER: 60/083392  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083495  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083496  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083499  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083545  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083554  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083558  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083559  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083500  
PRIOR FILING DATE: 1998-04-29  
PRIOR APPLICATION NUMBER: 60/083742  
PRIOR FILING DATE: 1998-04-30  
PRIOR APPLICATION NUMBER: 60/084366  
PRIOR FILING DATE: 1998-05-05  
PRIOR APPLICATION NUMBER: 60/084414  
PRIOR FILING DATE: 1998-05-06  
PRIOR APPLICATION NUMBER: 60/084441  
PRIOR FILING DATE: 1998-05-06  
PRIOR APPLICATION NUMBER: 60/084637  
PRIOR FILING DATE: 1998-05-07  
PRIOR APPLICATION NUMBER: 60/084639  
PRIOR FILING DATE: 1998-05-07  
PRIOR APPLICATION NUMBER: 60/084640  
PRIOR FILING DATE: 1998-05-07  
PRIOR APPLICATION NUMBER: 60/084598  
PRIOR FILING DATE: 1998-05-07  
PRIOR APPLICATION NUMBER: 60/084600  
PRIOR FILING DATE: 1998-05-07

2 PRIOR APPLICATION NUMBER: 60/084527  
 2 PRIOR FILING DATE: 1998-05-07  
 2 PRIOR APPLICATION NUMBER: 60/084543  
 2 PRIOR FILING DATE: 1998-05-07  
 2 PRIOR APPLICATION NUMBER: 60/085449  
 2 PRIOR FILING DATE: 1998-05-13  
 2 PRIOR APPLICATION NUMBER: 60/085448  
 2 PRIOR FILING DATE: 1998-05-13  
 2 PRIOR APPLICATION NUMBER: 60/085423  
 2 PRIOR FILING DATE: 1998-05-13  
 2 PRIOR APPLICATION NUMBER: 60/085582  
 2 PRIOR FILING DATE: 1998-05-15  
 2 PRIOR APPLICATION NUMBER: 60/085700  
 2 PRIOR FILING DATE: 1998-05-15  
 2 PRIOR APPLICATION NUMBER: 60/085689  
 2 PRIOR FILING DATE: 1998-05-15  
 2 PRIOR APPLICATION NUMBER: 60/085579  
 2 PRIOR FILING DATE: 1998-05-15  
 2 PRIOR APPLICATION NUMBER: 60/085580  
 2 PRIOR FILING DATE: 1998-05-15  
 2 PRIOR APPLICATION NUMBER: 60/085673  
 2 PRIOR FILING DATE: 1998-05-15  
 2 PRIOR APPLICATION NUMBER: 60/085704  
 2 PRIOR FILING DATE: 1998-05-15  
 2 PRIOR APPLICATION NUMBER: 60/085697

Query Match: 63.0%; Score 12.6; DB 9; Length 45;

Best Local Similarity 78.9%; Pred. No. 4.5e+03;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGAGCTTCCTCCAGG 19

1111 1 111 111 111

Db 35 GAGAGCTTCCTCCAGG 17

RESULT 13

US-09-978 192A 50/c

Sequence 50, Application US/09478192A

Patent No. US2002017755A1

GENERAL INFORMATION:

APPLICANT: Ashkenazi, Avi

APPLICANT: Baker Kevin P.

APPLICANT: Batistoni, David

APPLICANT: Besnoyers, Luc

APPLICANT: Eaton, Dan

APPLICANT: Ferrara, Napoleon

APPLICANT: Filvaroff, Ellen

APPLICANT: Ford, Sherman

APPLICANT: Gao, Wei-Grand

APPLICANT: Gerber, Hanspeter

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Grimaldi, J. Christopher

APPLICANT: Gurney, Austin L.

APPLICANT: Hillan, Kenneth J.

APPLICANT: Kujavina, Ivar J.

APPLICANT: Kuo, Sophia S.

APPLICANT: Napier, Mary A.

APPLICANT: Pan, James

APPLICANT: Paoni, Nicholas P.

APPLICANT: Roy, Margaret Ann

APPLICANT: Shelton, David L.

APPLICANT: Stewart, Timothy A.

APPLICANT: Thomas, Daniel

APPLICANT: Williams, P. Mickey

APPLICANT: Wood, William L.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleotide

TITLE OF INVENTION: Aids Encoding the Same

FILE REFERENCE: P26,001,009

CURRENT APPLICATION NUMBER: US/09478192A

CURRENT FILING DATE: 2001-10-15

PRIOR APPLICATION NUMBER: 09/016085

2 PRIOR FILING DATE: 2001-07-30  
 2 PRIOR APPLICATION NUMBER: 60/062250  
 2 PRIOR FILING DATE: 1997-10-17  
 2 PRIOR APPLICATION NUMBER: 60/064249  
 2 PRIOR FILING DATE: 1997-11-03  
 2 PRIOR APPLICATION NUMBER: 60/065411  
 2 PRIOR FILING DATE: 1997-11-14  
 2 PRIOR APPLICATION NUMBER: 60/066464  
 2 PRIOR FILING DATE: 1997-11-21  
 2 PRIOR APPLICATION NUMBER: 60/077450  
 2 PRIOR FILING DATE: 1998-03-10  
 2 PRIOR APPLICATION NUMBER: 60/077642  
 2 PRIOR FILING DATE: 1998-03-11  
 2 PRIOR APPLICATION NUMBER: 60/077641  
 2 PRIOR FILING DATE: 1998-03-11  
 2 PRIOR APPLICATION NUMBER: 60/077649  
 2 PRIOR FILING DATE: 1998-03-11  
 2 PRIOR APPLICATION NUMBER: 60/077791  
 2 PRIOR FILING DATE: 1998-03-12  
 2 PRIOR APPLICATION NUMBER: 60/078004  
 2 PRIOR FILING DATE: 1998-03-14  
 2 PRIOR APPLICATION NUMBER: 60/078886  
 2 PRIOR FILING DATE: 1998-03-20  
 2 PRIOR APPLICATION NUMBER: 60/078936  
 2 PRIOR FILING DATE: 1998-03-20  
 2 PRIOR APPLICATION NUMBER: 60/078910  
 2 PRIOR FILING DATE: 1998-03-20  
 2 PRIOR APPLICATION NUMBER: 60/078939  
 2 PRIOR FILING DATE: 1998-03-20  
 2 PRIOR APPLICATION NUMBER: 60/079294  
 2 PRIOR FILING DATE: 1998-03-25  
 2 PRIOR APPLICATION NUMBER: 60/079656  
 2 PRIOR FILING DATE: 1998-03-26  
 2 PRIOR APPLICATION NUMBER: 60/079664  
 2 PRIOR FILING DATE: 1998-03-27  
 2 PRIOR APPLICATION NUMBER: 60/079689  
 2 PRIOR FILING DATE: 1998-03-27  
 2 PRIOR APPLICATION NUMBER: 60/079663  
 2 PRIOR FILING DATE: 1998-03-27  
 2 PRIOR APPLICATION NUMBER: 60/079728  
 2 PRIOR FILING DATE: 1998-03-27  
 2 PRIOR APPLICATION NUMBER: 60/079786  
 2 PRIOR FILING DATE: 1998-03-27  
 2 PRIOR APPLICATION NUMBER: 60/079920  
 2 PRIOR FILING DATE: 1998-03-30  
 2 PRIOR APPLICATION NUMBER: 60/079923  
 2 PRIOR FILING DATE: 1998-03-30  
 2 PRIOR APPLICATION NUMBER: 60/080105  
 2 PRIOR FILING DATE: 1998-03-31  
 2 PRIOR APPLICATION NUMBER: 60/080107  
 2 PRIOR FILING DATE: 1998-03-31  
 2 PRIOR APPLICATION NUMBER: 60/080165  
 2 PRIOR FILING DATE: 1998-03-31  
 2 PRIOR APPLICATION NUMBER: 60/080194  
 2 PRIOR FILING DATE: 1998-03-31  
 2 PRIOR APPLICATION NUMBER: 60/080327  
 2 PRIOR FILING DATE: 1998-04-01  
 2 PRIOR APPLICATION NUMBER: 60/080328  
 2 PRIOR FILING DATE: 1998-04-01  
 2 PRIOR APPLICATION NUMBER: 60/080333  
 2 PRIOR FILING DATE: 1998-04-01  
 2 PRIOR APPLICATION NUMBER: 60/080334  
 2 PRIOR FILING DATE: 1998-04-01  
 2 PRIOR APPLICATION NUMBER: 60/081070  
 2 PRIOR FILING DATE: 1998-04-08  
 2 PRIOR APPLICATION NUMBER: 60/081049  
 2 PRIOR FILING DATE: 1998-04-08  
 2 PRIOR APPLICATION NUMBER: 60/081071  
 2 PRIOR FILING DATE: 1998-04-08  
 2 PRIOR APPLICATION NUMBER: 60/081195  
 2 PRIOR FILING DATE: 1998-04-08  
 2 PRIOR APPLICATION NUMBER: 60/081203  
 2 PRIOR FILING DATE: 1998-04-09



1 PRIOR FILING DATE: 1998-04-15  
 2 PRIOR APPLICATION NUMBER: 60/081229  
 3 PRIOR FILING DATE: 1998-04-09  
 4 PRIOR APPLICATION NUMBER: 60/081955  
 5 PRIOR FILING DATE: 1998-04-15  
 6 PRIOR APPLICATION NUMBER: 60/081817  
 7 PRIOR FILING DATE: 1998-04-15  
 8 PRIOR APPLICATION NUMBER: 60/081819  
 9 PRIOR FILING DATE: 1998-04-15  
 10 PRIOR APPLICATION NUMBER: 60/081952  
 11 PRIOR FILING DATE: 1998-04-15  
 12 PRIOR APPLICATION NUMBER: 60/081848  
 13 PRIOR FILING DATE: 1998-04-15  
 14 PRIOR APPLICATION NUMBER: 60/082568  
 15 PRIOR FILING DATE: 1998-04-21  
 16 PRIOR APPLICATION NUMBER: 60/082569  
 17 PRIOR FILING DATE: 1998-04-21  
 18 PRIOR APPLICATION NUMBER: 60/082704  
 19 PRIOR FILING DATE: 1998-04-22  
 20 PRIOR APPLICATION NUMBER: 60/082804  
 21 PRIOR FILING DATE: 1998-04-22  
 22 PRIOR APPLICATION NUMBER: 60/082700  
 23 PRIOR FILING DATE: 1998-04-22  
 24 PRIOR APPLICATION NUMBER: 60/082797  
 25 PRIOR FILING DATE: 1998-04-22  
 26 PRIOR APPLICATION NUMBER: 60/082796  
 27 PRIOR FILING DATE: 1998-04-24  
 28 PRIOR APPLICATION NUMBER: 60/084336  
 29 PRIOR FILING DATE: 1998-04-27  
 30 PRIOR APPLICATION NUMBER: 60/084322  
 31 PRIOR FILING DATE: 1998-04-28  
 32 PRIOR APPLICATION NUMBER: 60/084392  
 33 PRIOR FILING DATE: 1998-04-29  
 34 PRIOR APPLICATION NUMBER: 60/084395  
 35 PRIOR FILING DATE: 1998-04-29  
 36 PRIOR APPLICATION NUMBER: 60/084396  
 37 PRIOR FILING DATE: 1998-04-29  
 38 PRIOR APPLICATION NUMBER: 60/084499  
 39 PRIOR FILING DATE: 1998-04-29  
 40 PRIOR APPLICATION NUMBER: 60/084545  
 41 PRIOR FILING DATE: 1998-04-29  
 42 PRIOR APPLICATION NUMBER: 60/084554  
 43 PRIOR FILING DATE: 1998-04-29  
 44 PRIOR APPLICATION NUMBER: 60/084558  
 45 PRIOR FILING DATE: 1998-04-29  
 46 PRIOR APPLICATION NUMBER: 60/084559  
 47 PRIOR FILING DATE: 1998-04-29  
 48 PRIOR APPLICATION NUMBER: 60/084500  
 49 PRIOR FILING DATE: 1998-04-29  
 50 PRIOR APPLICATION NUMBER: 60/084742  
 51 PRIOR FILING DATE: 1998-04-30  
 52 PRIOR APPLICATION NUMBER: 60/084566  
 53 PRIOR FILING DATE: 1998-05-05  
 54 PRIOR APPLICATION NUMBER: 60/084414  
 55 PRIOR FILING DATE: 1998-05-06  
 56 PRIOR APPLICATION NUMBER: 60/084441  
 57 PRIOR FILING DATE: 1998-05-06  
 58 PRIOR APPLICATION NUMBER: 60/084637  
 59 PRIOR FILING DATE: 1998-05-07  
 60 PRIOR APPLICATION NUMBER: 60/084649  
 61 PRIOR FILING DATE: 1998-05-07  
 62 PRIOR APPLICATION NUMBER: 60/084598  
 63 PRIOR FILING DATE: 1998-05-07  
 64 PRIOR APPLICATION NUMBER: 60/084600  
 65 PRIOR FILING DATE: 1998-05-07  
 66 PRIOR APPLICATION NUMBER: 60/084627  
 67 PRIOR FILING DATE: 1998-05-07  
 68 PRIOR APPLICATION NUMBER: 60/084643  
 69 PRIOR FILING DATE: 1998-05-07  
 70 PRIOR APPLICATION NUMBER: 60/085339  
 71 PRIOR FILING DATE: 1998-05-13  
 72 PRIOR APPLICATION NUMBER: 60/085338

1 PRIOR FILING DATE: 1998-05-14  
 2 PRIOR APPLICATION NUMBER: 60/085323  
 3 PRIOR FILING DATE: 1998-05-14  
 4 PRIOR APPLICATION NUMBER: 60/085582  
 5 PRIOR FILING DATE: 1998-05-15  
 6 PRIOR APPLICATION NUMBER: 60/085700  
 7 PRIOR FILING DATE: 1998-05-15  
 8 PRIOR APPLICATION NUMBER: 60/085689  
 9 PRIOR FILING DATE: 1998-05-15  
 10 PRIOR APPLICATION NUMBER: 60/085579  
 11 PRIOR FILING DATE: 1998-05-15  
 12 PRIOR APPLICATION NUMBER: 60/085580  
 13 PRIOR FILING DATE: 1998-05-15  
 14 PRIOR APPLICATION NUMBER: 60/085573  
 15 PRIOR FILING DATE: 1998-05-15  
 16 PRIOR APPLICATION NUMBER: 60/085704  
 17 PRIOR FILING DATE: 1998-05-15  
 18 PRIOR APPLICATION NUMBER: 60/085697

Query Match 63.0% Score 12.6; DB 9; Length 45;  
 Best Local Similarity 78.9% Prod. No. 4 50-04;  
 Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGAGAGAGAGAGAGAG 19  
 IIII I III III III  
 10 35 GAGAGAGAGAGAG 17

## RESULT 14

US-09-999-832A-50/c  
 : Sequence 50, Application US/9999832A  
 : Publication No. US20020192706A1  
 : GENERAL INFORMATION:  
 : APPLICANT: Ashkenazi, Avi  
 : APPLICANT: Baker, Kevin P.  
 : APPLICANT: Botstein, David  
 : APPLICANT: Bestoyers, Luc  
 : APPLICANT: Eaton, Dan  
 : APPLICANT: Ferrara, Napoleone  
 : APPLICANT: Filvaroff, Ellen  
 : APPLICANT: Ford, Sherman  
 : APPLICANT: Gao, Wei-Guang  
 : APPLICANT: Gerber, Hanspeter  
 : APPLICANT: Gertlissen, Mary E.  
 : APPLICANT: Goddard, Andrew  
 : APPLICANT: Godowski, Paul J.  
 : APPLICANT: Grimaldi, J. Christopher  
 : APPLICANT: Gurney, Austin L.  
 : APPLICANT: Hillan, Kenneth J.  
 : APPLICANT: Kljavin, Ivar J.  
 : APPLICANT: Kuo, Sophia S.  
 : APPLICANT: Napier, Mary A.  
 : APPLICANT: Pan, James  
 : APPLICANT: Patel, Nicholas F.  
 : APPLICANT: Roy, Margaret Ann  
 : APPLICANT: Shelton, David L.  
 : APPLICANT: Stewart, Timothy A.  
 : APPLICANT: Tomas, Daniel  
 : APPLICANT: Williams, P. Mickey  
 : APPLICANT: Wood, William L.  
 : TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 : FILE OF INVENTION: Acids Encoded the Same  
 : FILE REFERENCE: P268031064  
 : CURRENT APPLICATION NUMBER: US/99/999,832A  
 : CURRENT FILING DATE: 2001-10-24  
 : PRIOR APPLICATION NUMBER: 09/918585  
 : PRIOR FILING DATE: 2001-07-30  
 : PRIOR APPLICATION NUMBER: 60/062250  
 : PRIOR FILING DATE: 1997-10-17  
 : PRIOR APPLICATION NUMBER: 60/064249  
 : PRIOR FILING DATE: 1997-11-03  
 : PRIOR APPLICATION NUMBER: 60/065311  
 : PRIOR FILING DATE: 1997-11-13

2 PRIOR APPLICATION NUMBER: 60/066404  
3 PRIOR FILING DATE: 1997-11-21  
4 PRIOR APPLICATION NUMBER: 60/077450  
5 PRIOR FILING DATE: 1998-03-10  
6 PRIOR APPLICATION NUMBER: 60/077642  
7 PRIOR FILING DATE: 1998-03-11  
8 PRIOR APPLICATION NUMBER: 60/077641  
9 PRIOR FILING DATE: 1998-03-11  
10 PRIOR APPLICATION NUMBER: 60/077649  
11 PRIOR FILING DATE: 1998-03-11  
12 PRIOR APPLICATION NUMBER: 60/077791  
13 PRIOR FILING DATE: 1998-03-12  
14 PRIOR APPLICATION NUMBER: 60/078004  
15 PRIOR FILING DATE: 1998-03-13  
16 PRIOR APPLICATION NUMBER: 60/078886  
17 PRIOR FILING DATE: 1998-03-20  
18 PRIOR APPLICATION NUMBER: 60/078946  
19 PRIOR FILING DATE: 1998-03-20  
20 PRIOR APPLICATION NUMBER: 60/078910  
21 PRIOR FILING DATE: 1998-03-20  
22 PRIOR APPLICATION NUMBER: 60/078949  
23 PRIOR FILING DATE: 1998-03-20  
24 PRIOR APPLICATION NUMBER: 60/079294  
25 PRIOR FILING DATE: 1998-03-25  
26 PRIOR APPLICATION NUMBER: 60/079656  
27 PRIOR FILING DATE: 1998-03-26  
28 PRIOR APPLICATION NUMBER: 60/079664  
29 PRIOR FILING DATE: 1998-03-27  
30 PRIOR APPLICATION NUMBER: 60/079689  
31 PRIOR FILING DATE: 1998-03-27  
32 PRIOR APPLICATION NUMBER: 60/079663  
33 PRIOR FILING DATE: 1998-03-27  
34 PRIOR APPLICATION NUMBER: 60/079728  
35 PRIOR FILING DATE: 1998-03-27  
36 PRIOR APPLICATION NUMBER: 60/079786  
37 PRIOR FILING DATE: 1998-03-27  
38 PRIOR APPLICATION NUMBER: 60/079920  
39 PRIOR FILING DATE: 1998-03-30  
40 PRIOR APPLICATION NUMBER: 60/079924  
41 PRIOR FILING DATE: 1998-03-30  
42 PRIOR APPLICATION NUMBER: 60/080105  
43 PRIOR FILING DATE: 1998-03-31  
44 PRIOR APPLICATION NUMBER: 60/080107  
45 PRIOR FILING DATE: 1998-03-31  
46 PRIOR APPLICATION NUMBER: 60/080165  
47 PRIOR FILING DATE: 1998-03-31  
48 PRIOR APPLICATION NUMBER: 60/080194  
49 PRIOR FILING DATE: 1998-03-31  
50 PRIOR APPLICATION NUMBER: 60/080327  
51 PRIOR FILING DATE: 1998-04-01  
52 PRIOR APPLICATION NUMBER: 60/080328  
53 PRIOR FILING DATE: 1998-04-01  
54 PRIOR APPLICATION NUMBER: 60/080333  
55 PRIOR FILING DATE: 1998-04-01  
56 PRIOR APPLICATION NUMBER: 60/080334  
57 PRIOR FILING DATE: 1998-04-01  
58 PRIOR APPLICATION NUMBER: 60/081070  
59 PRIOR FILING DATE: 1998-04-08  
60 PRIOR APPLICATION NUMBER: 60/081049  
61 PRIOR FILING DATE: 1998-04-08  
62 PRIOR APPLICATION NUMBER: 60/081071  
63 PRIOR FILING DATE: 1998-04-08  
64 PRIOR APPLICATION NUMBER: 60/081195  
65 PRIOR FILING DATE: 1998-04-08  
66 PRIOR APPLICATION NUMBER: 60/081203  
67 PRIOR FILING DATE: 1998-04-09  
68 PRIOR APPLICATION NUMBER: 60/081229  
69 PRIOR FILING DATE: 1998-04-09  
70 PRIOR APPLICATION NUMBER: 60/081995  
71 PRIOR FILING DATE: 1998-04-15  
72 PRIOR APPLICATION NUMBER: 60/081817  
73 PRIOR FILING DATE: 1998-04-15  
74 PRIOR APPLICATION NUMBER: 60/081819  
75 PRIOR FILING DATE: 1998-04-15  
76 PRIOR APPLICATION NUMBER: 60/081452  
77 PRIOR FILING DATE: 1998-04-15  
78 PRIOR APPLICATION NUMBER: 60/081838  
79 PRIOR FILING DATE: 1998-04-15  
80 PRIOR APPLICATION NUMBER: 60/082568  
81 PRIOR FILING DATE: 1998-04-21  
82 PRIOR APPLICATION NUMBER: 60/082569  
83 PRIOR FILING DATE: 1998-04-21  
84 PRIOR APPLICATION NUMBER: 60/082704  
85 PRIOR FILING DATE: 1998-04-22  
86 PRIOR APPLICATION NUMBER: 60/082804  
87 PRIOR FILING DATE: 1998-04-22  
88 PRIOR APPLICATION NUMBER: 60/082700  
89 PRIOR FILING DATE: 1998-04-22  
90 PRIOR APPLICATION NUMBER: 60/082797  
91 PRIOR FILING DATE: 1998-04-22  
92 PRIOR APPLICATION NUMBER: 60/082796  
93 PRIOR FILING DATE: 1998-04-23  
94 PRIOR APPLICATION NUMBER: 60/083386  
95 PRIOR FILING DATE: 1998-04-27  
96 PRIOR APPLICATION NUMBER: 60/083422  
97 PRIOR FILING DATE: 1998-04-28  
98 PRIOR APPLICATION NUMBER: 60/083392  
99 PRIOR FILING DATE: 1998-04-29  
100 PRIOR APPLICATION NUMBER: 60/083495  
101 PRIOR FILING DATE: 1998-04-29  
102 PRIOR APPLICATION NUMBER: 60/083496  
103 PRIOR FILING DATE: 1998-04-29  
104 PRIOR APPLICATION NUMBER: 60/083499  
105 PRIOR FILING DATE: 1998-04-29  
106 PRIOR APPLICATION NUMBER: 60/083545  
107 PRIOR FILING DATE: 1998-04-29  
108 PRIOR APPLICATION NUMBER: 60/083554  
109 PRIOR FILING DATE: 1998-04-29  
110 PRIOR APPLICATION NUMBER: 60/083558  
111 PRIOR FILING DATE: 1998-04-29  
112 PRIOR APPLICATION NUMBER: 60/083559  
113 PRIOR FILING DATE: 1998-04-29  
114 PRIOR APPLICATION NUMBER: 60/083500  
115 PRIOR FILING DATE: 1998-04-29  
116 PRIOR APPLICATION NUMBER: 60/083742  
117 PRIOR FILING DATE: 1998-04-30  
118 PRIOR APPLICATION NUMBER: 60/084366  
119 PRIOR FILING DATE: 1998-05-05  
120 PRIOR APPLICATION NUMBER: 60/084414  
121 PRIOR FILING DATE: 1998-05-06  
122 PRIOR APPLICATION NUMBER: 60/084441  
123 PRIOR FILING DATE: 1998-05-06  
124 PRIOR APPLICATION NUMBER: 60/084637  
125 PRIOR FILING DATE: 1998-05-07  
126 PRIOR APPLICATION NUMBER: 60/084639  
127 PRIOR FILING DATE: 1998-05-07  
128 PRIOR APPLICATION NUMBER: 60/084640  
129 PRIOR FILING DATE: 1998-05-07  
130 PRIOR APPLICATION NUMBER: 60/084598  
131 PRIOR FILING DATE: 1998-05-07  
132 PRIOR APPLICATION NUMBER: 60/084600  
133 PRIOR FILING DATE: 1998-05-07  
134 PRIOR APPLICATION NUMBER: 60/084627  
135 PRIOR FILING DATE: 1998-05-07  
136 PRIOR APPLICATION NUMBER: 60/084643  
137 PRIOR FILING DATE: 1998-05-07  
138 PRIOR APPLICATION NUMBER: 60/085339  
139 PRIOR FILING DATE: 1998-05-13  
140 PRIOR APPLICATION NUMBER: 60/085338  
141 PRIOR FILING DATE: 1998-05-13  
142 PRIOR APPLICATION NUMBER: 60/085323  
143 PRIOR FILING DATE: 1998-05-13  
144 PRIOR APPLICATION NUMBER: 60/085582  
145 PRIOR FILING DATE: 1998-05-15  
146 PRIOR APPLICATION NUMBER: 60/085700  
147 PRIOR FILING DATE: 1998-05-15

1 PRIOR APPLICATION NUMBER: 60/085689  
2 PRIOR FILING DATE: 1998-05-15  
3 PRIOR APPLICATION NUMBER: 60/085579  
4 PRIOR FILING DATE: 1998-05-15  
5 PRIOR APPLICATION NUMBER: 60/085560  
6 PRIOR FILING DATE: 1998-05-15  
7 PRIOR APPLICATION NUMBER: 60/085573  
8 PRIOR FILING DATE: 1998-05-15  
9 PRIOR APPLICATION NUMBER: 60/085704  
10 PRIOR FILING DATE: 1998-05-15  
11 PRIOR APPLICATION NUMBER: 60/085647

Query Match 63.0% Score 12.6: 5B 9: Length 45:

Best Local Similarity 78.9% Prod. No. 4.5e+03:

Matches 15: Conservative 0: Mismatches 4: Indels 0: Gaps 0:

QY 1 GAGAGATCTCTCCGCG 19

DB 45 GAGATCTCTCTCAAG 17

RESULT 15

US-09-978 189-50/C

1 Sequence 50, Application US/09978189

2 Publication No. US20030004102A1

3 GENERAL INFORMATION:

4 APPLICANT: ASUKODAZI, Avi

5 APPLICANT: Baker, Kevin P.

6 APPLICANT: Botstein, David

7 APPLICANT: Desmoyers, Luc

8 APPLICANT: Eaton, Dan

9 APPLICANT: Ferrara, Napoleon

10 APPLICANT: Filvaroff, Ellen

11 APPLICANT: Fong, Sherman

12 APPLICANT: Gao, Wei-Qiang

13 APPLICANT: Gerber, Hanspeter

14 APPLICANT: Gerritsen, Mary E.

15 APPLICANT: Goddard, Audrey

16 APPLICANT: Godowski, Paul J.

17 APPLICANT: Grimaldi, J. Christopher

18 APPLICANT: Gurney, Austin L.

19 APPLICANT: Hillan, Kenneth J.

20 APPLICANT: Kijavlin, Ivar J.

21 APPLICANT: Kuo, Sophia S.

22 APPLICANT: Napier, Mary A.

23 APPLICANT: Pan, James

24 APPLICANT: Paoni, Nicholas F.

25 APPLICANT: Roy, Margaret Ann

26 APPLICANT: Shelton, David L.

27 APPLICANT: Stewart, Timothy A.

28 APPLICANT: Tumas, Daniel

29 APPLICANT: Williams, P. Mickey

30 APPLICANT: Wood, William I.

31 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

32 TITLE OF INVENTION: Acids Encoding the Same

33 FILE REFERENCE: P2630P1C7

34 CURRENT APPLICATION NUMBER: US/09978189

35 CURRENT FILING DATE: 2001-10-15

36 PRIOR APPLICATION NUMBER: 09/918585

37 PRIOR FILING DATE: 2001-07-10

38 PRIOR APPLICATION NUMBER: 60/0962250

39 PRIOR FILING DATE: 1997-10-17

40 PRIOR APPLICATION NUMBER: 60/064249

41 PRIOR FILING DATE: 1997-11-04

42 PRIOR APPLICATION NUMBER: 60/065311

43 PRIOR FILING DATE: 1997-11-14

44 PRIOR APPLICATION NUMBER: 60/066364

45 PRIOR FILING DATE: 1997-11-21

46 PRIOR APPLICATION NUMBER: 60/077450

47 PRIOR FILING DATE: 1998-03-10

48 PRIOR APPLICATION NUMBER: 60/077642

49 PRIOR FILING DATE: 1998-03-11

50 PRIOR APPLICATION NUMBER: 60/077641

1 PRIOR FILING DATE: 1998-04-11  
2 PRIOR APPLICATION NUMBER: 60/077649  
3 PRIOR FILING DATE: 1998-04-11  
4 PRIOR APPLICATION NUMBER: 60/077791  
5 PRIOR FILING DATE: 1998-04-12  
6 PRIOR APPLICATION NUMBER: 60/078004  
7 PRIOR FILING DATE: 1998-04-14  
8 PRIOR APPLICATION NUMBER: 60/078886  
9 PRIOR FILING DATE: 1998-04-20  
10 PRIOR APPLICATION NUMBER: 60/078936  
11 PRIOR FILING DATE: 1998-04-20  
12 PRIOR APPLICATION NUMBER: 60/078910  
13 PRIOR FILING DATE: 1998-04-20  
14 PRIOR APPLICATION NUMBER: 60/078939  
15 PRIOR FILING DATE: 1998-04-20  
16 PRIOR APPLICATION NUMBER: 60/079294  
17 PRIOR FILING DATE: 1998-04-25  
18 PRIOR APPLICATION NUMBER: 60/079656  
19 PRIOR FILING DATE: 1998-04-26  
20 PRIOR APPLICATION NUMBER: 60/079664  
21 PRIOR FILING DATE: 1998-04-27  
22 PRIOR APPLICATION NUMBER: 60/079689  
23 PRIOR FILING DATE: 1998-04-27  
24 PRIOR APPLICATION NUMBER: 60/079663  
25 PRIOR FILING DATE: 1998-04-27  
26 PRIOR APPLICATION NUMBER: 60/079728  
27 PRIOR FILING DATE: 1998-04-27  
28 PRIOR APPLICATION NUMBER: 60/079786  
29 PRIOR FILING DATE: 1998-04-27  
30 PRIOR APPLICATION NUMBER: 60/079920  
31 PRIOR FILING DATE: 1998-04-30  
32 PRIOR APPLICATION NUMBER: 60/079923  
33 PRIOR FILING DATE: 1998-04-30  
34 PRIOR APPLICATION NUMBER: 60/080105  
35 PRIOR FILING DATE: 1998-04-31  
36 PRIOR APPLICATION NUMBER: 60/080107  
37 PRIOR FILING DATE: 1998-04-31  
38 PRIOR APPLICATION NUMBER: 60/080165  
39 PRIOR FILING DATE: 1998-04-31  
40 PRIOR APPLICATION NUMBER: 60/080194  
41 PRIOR FILING DATE: 1998-04-31  
42 PRIOR APPLICATION NUMBER: 60/080327  
43 PRIOR FILING DATE: 1998-04-01  
44 PRIOR APPLICATION NUMBER: 60/080328  
45 PRIOR FILING DATE: 1998-04-01  
46 PRIOR APPLICATION NUMBER: 60/080433  
47 PRIOR FILING DATE: 1998-04-01  
48 PRIOR APPLICATION NUMBER: 60/080434  
49 PRIOR FILING DATE: 1998-04-01  
50 PRIOR APPLICATION NUMBER: 60/081070  
51 PRIOR FILING DATE: 1998-04-08  
52 PRIOR APPLICATION NUMBER: 60/081049  
53 PRIOR FILING DATE: 1998-04-08  
54 PRIOR APPLICATION NUMBER: 60/081071  
55 PRIOR FILING DATE: 1998-04-08  
56 PRIOR APPLICATION NUMBER: 60/081195  
57 PRIOR FILING DATE: 1998-04-08  
58 PRIOR APPLICATION NUMBER: 60/081203  
59 PRIOR FILING DATE: 1998-04-09  
60 PRIOR APPLICATION NUMBER: 60/081249  
61 PRIOR FILING DATE: 1998-04-09  
62 PRIOR APPLICATION NUMBER: 60/081955  
63 PRIOR FILING DATE: 1998-04-15  
64 PRIOR APPLICATION NUMBER: 60/081817  
65 PRIOR FILING DATE: 1998-04-15  
66 PRIOR APPLICATION NUMBER: 60/081819  
67 PRIOR FILING DATE: 1998-04-15  
68 PRIOR APPLICATION NUMBER: 60/081952  
69 PRIOR FILING DATE: 1998-04-15  
70 PRIOR APPLICATION NUMBER: 60/081838  
71 PRIOR FILING DATE: 1998-04-15  
72 PRIOR APPLICATION NUMBER: 60/082568  
73 PRIOR FILING DATE: 1998-04-21

1 PRIOR APPLICATION NUMBER: 60/082569  
2 PRIOR FILING DATE: 1998-04-21  
3 PRIOR APPLICATION NUMBER: 60/082704  
4 PRIOR FILING DATE: 1998-04-22  
5 PRIOR APPLICATION NUMBER: 60/082804  
6 PRIOR FILING DATE: 1998-04-22  
7 PRIOR APPLICATION NUMBER: 60/082700  
8 PRIOR FILING DATE: 1998-04-22  
9 PRIOR APPLICATION NUMBER: 60/082797  
10 PRIOR FILING DATE: 1998-04-22  
11 PRIOR APPLICATION NUMBER: 60/082796  
12 PRIOR FILING DATE: 1998-04-23  
13 PRIOR APPLICATION NUMBER: 60/083436  
14 PRIOR FILING DATE: 1998-04-27  
15 PRIOR APPLICATION NUMBER: 60/083422  
16 PRIOR FILING DATE: 1998-04-28  
17 PRIOR APPLICATION NUMBER: 60/083492  
18 PRIOR FILING DATE: 1998-04-29  
19 PRIOR APPLICATION NUMBER: 60/083495  
20 PRIOR FILING DATE: 1998-04-29  
21 PRIOR APPLICATION NUMBER: 60/083496  
22 PRIOR FILING DATE: 1998-04-29  
23 PRIOR APPLICATION NUMBER: 60/083499  
24 PRIOR FILING DATE: 1998-04-29  
25 PRIOR APPLICATION NUMBER: 60/083545  
26 PRIOR FILING DATE: 1998-04-29  
27 PRIOR APPLICATION NUMBER: 60/083554  
28 PRIOR FILING DATE: 1998-04-29  
29 PRIOR APPLICATION NUMBER: 60/083558  
30 PRIOR FILING DATE: 1998-04-29  
31 PRIOR APPLICATION NUMBER: 60/083559  
32 PRIOR FILING DATE: 1998-04-29  
33 PRIOR APPLICATION NUMBER: 60/083500  
34 PRIOR FILING DATE: 1998-04-29  
35 PRIOR APPLICATION NUMBER: 60/083742  
36 PRIOR FILING DATE: 1998-04-30  
37 PRIOR APPLICATION NUMBER: 60/084466  
38 PRIOR FILING DATE: 1998-05-05  
39 PRIOR APPLICATION NUMBER: 60/084414  
40 PRIOR FILING DATE: 1998-05-06  
41 PRIOR APPLICATION NUMBER: 60/084441  
42 PRIOR FILING DATE: 1998-05-06  
43 PRIOR APPLICATION NUMBER: 60/084487  
44 PRIOR FILING DATE: 1998-05-07  
45 PRIOR APPLICATION NUMBER: 60/084439  
46 PRIOR FILING DATE: 1998-05-07  
47 PRIOR APPLICATION NUMBER: 60/084440  
48 PRIOR FILING DATE: 1998-05-07  
49 PRIOR APPLICATION NUMBER: 60/084598  
50 PRIOR FILING DATE: 1998-05-07  
51 PRIOR APPLICATION NUMBER: 60/084600  
52 PRIOR FILING DATE: 1998-05-07  
53 PRIOR APPLICATION NUMBER: 60/084627  
54 PRIOR FILING DATE: 1998-05-07  
55 PRIOR APPLICATION NUMBER: 60/084643  
56 PRIOR FILING DATE: 1998-05-07  
57 PRIOR APPLICATION NUMBER: 60/085339  
58 PRIOR FILING DATE: 1998-05-13  
59 PRIOR APPLICATION NUMBER: 60/085438  
60 PRIOR FILING DATE: 1998-05-13  
61 PRIOR APPLICATION NUMBER: 60/085424  
62 PRIOR FILING DATE: 1998-05-13  
63 PRIOR APPLICATION NUMBER: 60/085582  
64 PRIOR FILING DATE: 1998-05-15  
65 PRIOR APPLICATION NUMBER: 60/085760  
66 PRIOR FILING DATE: 1998-05-15  
67 PRIOR APPLICATION NUMBER: 60/085689  
68 PRIOR FILING DATE: 1998-05-15  
69 PRIOR APPLICATION NUMBER: 60/085579  
70 PRIOR FILING DATE: 1998-05-15  
71 PRIOR APPLICATION NUMBER: 60/085580  
72 PRIOR FILING DATE: 1998-05-15  
73 PRIOR APPLICATION NUMBER: 60/085574

1 PRIOR FILING DATE: 1998-05-15  
2 PRIOR APPLICATION NUMBER: 60/085704  
3 PRIOR FILING DATE: 1998-05-15  
4 PRIOR APPLICATION NUMBER: 60/085697  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845  
846  
847  
848  
849  
850  
851  
852  
853  
854  
855  
856  
857  
858  
859  
860  
861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900  
901  
902  
903  
904  
905  
906  
907  
908  
909  
910  
911  
912  
913  
914  
915  
916  
917  
918  
919  
920  
921  
922  
923  
924  
925  
926  
927  
928  
929  
930  
931  
932  
933  
934  
935  
936  
937  
938  
939  
940  
941  
942  
943  
944  
945  
946  
947  
948  
949  
950  
951  
952  
953  
954  
955  
956  
957  
958  
959  
960  
961  
962  
963  
964  
965  
966  
967  
968  
969  
970  
971  
972  
973  
974  
975  
976  
977  
978  
979  
980  
981  
982  
983  
984  
985  
986  
987  
988  
989  
990  
991  
992  
993  
994  
995  
996  
997  
998  
999  
1000

```

? Patent No. US20020154545A1
? GENERAL INFORMATION:
? APPLICANT: Cohen, Daniel
? APPLICANT: Blumensfeld, Marta
? APPLICANT: Ilyia, Chumakov
? APPLICANT: Bouquellet, Lydie
? TITLE OF INVENTION: PROSTATE CANCER GENE
? FILE REFERENCE: GENSET180CP
? CURRENT APPLICATION NUMBER: US/09/853,526
? CURRENT FILING DATE: 2001-05-11
? PRIOR APPLICATION NUMBER: 09/338,907
? PRIOR FILING DATE: 1999-06-23
? PRIOR APPLICATION NUMBER: 06/996,406
? PRIOR FILING DATE: 1997-12-22
? PRIOR APPLICATION NUMBER: 60/099,658
? PRIOR FILING DATE: 1998-09-09
? PRIOR APPLICATION NUMBER: 09/218,207
? PRIOR FILING DATE: 1998-12-22
? NUMBER OF SEQ ID NOS: 578
? SOFTWARE: Patent.pm
? SEQ ID NO 410
? LENGTH: 47
? TYPE: DNA
? ORGANISM: Homo Sapiens
? FEATURE:
? NAME/KEY: allele
? LOCATION: 1..47
? OTHER INFORMATION: polymorphic fragment 99-12907-295, variant version of SEQ ID233
? NAME/KEY: allele
? LOCATION: 24
? OTHER INFORMATION: base G : A in SEQ ID233
? NAME/KEY: primer_bind
? LOCATION: 1..23
? OTHER INFORMATION: potential microsequencing oligo 99-12907-295.mis1
? NAME/KEY: primer_bind
? LOCATION: 25..47
? OTHER INFORMATION: complement potential microsequencing oligo 99-12907-295.mis2
US-09-853,526-310

Query Match      63.0%; Score 12.6; DB 9; Length 47;
Best Local Similarity 78.9%; Pred. No. 4, 5e+03;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CAGAGTCTCTCCGGGCG 20
DB 48 CATCAGGCTCTCCGGGCG 20

RESULT 18
US-09-901-484A-310/c
? Sequence 310, Application US/09901484A
? Patent No. US20020119460A1
? GENERAL INFORMATION:
? APPLICANT: Cohen, Daniel
? APPLICANT: Blumensfeld, Marta
? APPLICANT: Chumakov, Ilyia
? APPLICANT: Bouquellet, Lydie
? TITLE OF INVENTION: Prostate Cancer Gene
? FILE REFERENCE: GEN-111XC302
? CURRENT APPLICATION NUMBER: US/09/901,484A
? CURRENT FILING DATE: 2001-07-09
? PRIOR APPLICATION NUMBER: US 08/996,406
? PRIOR FILING DATE: 1997-12-22
? PRIOR APPLICATION NUMBER: US 60/099,658
? PRIOR FILING DATE: 1998-09-09
? PRIOR APPLICATION NUMBER: US 09/218,207
? PRIOR FILING DATE: 1998-12-22
? PRIOR APPLICATION NUMBER: US 09/338,907
? PRIOR FILING DATE: 1999-06-23
? PRIOR APPLICATION NUMBER: US 09/853,526
? NUMBER OF SEQ ID NOS: 578
? SOFTWARE: PatentIn version 3.1

```

```

? SEQ ID NO 410
? LENGTH: 47
? TYPE: LNA
? ORGANISM: Homo Sapiens
? FEATURE:
? NAME/KEY: allele
? LOCATION: (1)..(47)
? OTHER INFORMATION: polymorphic fragment 99-12907-295, variant version of SEQ ID 233
? NAME/KEY: allele
? LOCATION: (24)..(24)
? OTHER INFORMATION: polymorphic base G: A in SEQ ID 233
? NAME/KEY: primer_bind
? LOCATION: (1)..(24)
? OTHER INFORMATION: potential microsequencing oligo 99-12907-295.mis1
? NAME/KEY: primer_bind
? LOCATION: (25)..(47)
? OTHER INFORMATION: complement potential microsequencing oligo 99-12907-295.mis2
US-09-901-484A-310

```

```

Query Match      63.0%; Score 12.6; DB 10; Length 47;
Best Local Similarity 78.9%; Pred. No. 4, 5e+03;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

```

QY 2 CAGAGTCTCTCCGGGCG 20
DB 48 CATCAGGCTCTCCGGGCG 20

```

```

RESULT 19
US-09-801-274-442
? Sequence 442, Application US/09801274
? Patent No. US20020042319A1
? GENERAL INFORMATION:
? APPLICANT: Garfield, Michele
? APPLICANT: Ireland, James S.
? APPLICANT: Landry, Eric S.
? TITLE OF INVENTION: HUMAN SINGLE NUCLEOTIDE POLYMERIZISMS
? FILE REFERENCE: 4825,2009-001
? CURRENT APPLICATION NUMBER: US/09/801,274
? CURRENT FILING DATE: 2001-03-07
? PRIOR APPLICATION NUMBER: US 60/187,510
? PRIOR FILING DATE: 2000-04-07
? PRIOR APPLICATION NUMBER: US 60/206,129
? PRIOR FILING DATE: 2000-05-22
? NUMBER OF SEQ ID NOS: 1802
? SOFTWARE: FastSeq for Windows Version 4.0
? SEQ ID NO 442
? LENGTH: 41
? TYPE: DNA
? ORGANISM: Homo Sapiens
US-09-801-274-442

```

```

Query Match      62.0%; Score 12.4; DB 10; Length 41;
Best Local Similarity 81.2%; Pred. No. 5, 4e+03;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 5 CAGATCTCTCCGGGCG 20
DB 5 CAGATCTCTCCGGGCG 20

```

```

RESULT 20
US-10-006,852-21
? Sequence 21, Application US/10006852
? Publication No. US20030046732A1
? GENERAL INFORMATION:
? APPLICANT: Kimmersey, Alan M.
? APPLICANT: Lurano, Frank J.
? TITLE OF INVENTION: Methods for Regulating Plant GABA Production
? FILE REFERENCE: 7224-65
? CURRENT APPLICATION NUMBER: US/10/006,852
? CURRENT FILING DATE: 2002-07-01
? PRIOR APPLICATION NUMBER: US 60/246,467

```

```

: PRIOR FILING DATE: 2000-11-07
: NUMBER OF SEQ ID NOS: 24
: SOFTWARE: Patent In version 3.1
: SEQ ID NO 21
: LENGTH: 32
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Synthesized for primer
US 2006/054241

```

Query Match 61.0%; Score 12.2; DB 9; Length 32;  
Best Local Similarity 82.4%;  
Matches 14; Conservative 0; Mismatches 4; Indels  
Pred. No. 6,7003;

QY 4 ACCTC11101VGTG 19  
D# 111 11111 11111  
14 ACCTC11101VGTG 29

RESULT 21  
US-10 022 609 b/c  
? September 6, Application US/10022609  
? Publication No. US290 4002 4035A1  
? GENERAL INFORMATION:  
? APPLICANT: VANDLER, Richard L.  
? HOLMES, William E.  
? TITLE OF INVENTION: Structure, Production and Use of  
? Hereof in 2 Liquids  
? NUMBER OF SEQUENCES: 17  
? CORRESPONDENCE ADDRESS:  
? ADDRESSEE: Genentech, Inc.  
? STREET: 460 Point San Bruno Blvd  
? CITY: South San Francisco  
? STATE: California  
? COUNTRY: USA  
? ZIP: 94080

Quality Match  
61.0%; Score 12.2; PB 9; Length 42;

```

Best Local Similarity 82.4%;   Pred. No. 6,90004;
Matches 14;   Conservative 0;   Mismatches 4;   Indels 0;   Gaps 0;

QY  2  CAGACGCTCTCTCTCTT 16
    111111111111111111
PB  24  CAGACGCTCTCTCTCTT 7

RESULT 22
US 09 794 149 6
: Sequence 6, Application US/09794149
: Patent No. US2002015626A1
: GENERAL INFORMATION:
: APPLICANT: JAMES KENNETH A
: TITLE OF INVENTION: DNA Encoding A GABA BR2 Polypeptide And Uses Thereof
: FILE REFERENCE: 6400282803
: CURRENT APPLICATION NUMBER: US/09794149
: CURRENT FILING DATE: 2001 02 26
: NUMBER OF SEQ ID NOS: 94
: SOFTWARE: PatOutIn Ver. 2.1
: SEQ ID NO 6
: LENGTH: 45
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence:
: OTHER INFORMATION: of genomic info Probe
: US-09-794-149-6

```

|                       |       |              |         |           |   |        |    |
|-----------------------|-------|--------------|---------|-----------|---|--------|----|
| Query Match           | 61.0% | Score        | 1.2-2.3 | DB        | 9 | Length | 45 |
| Best Local Similarity | 82.4% | Pred.        | No.     | 6,900     | 0 |        |    |
| Matches               | 14    | Conservative | 0       | MSMatches | 3 | Models | 0  |
|                       |       |              |         |           |   |        | 0  |

```

RESULT 23
1 US 09,818,879_6
2 Sequence 6, Application US/09088879
3 Patent No. US-20010024200A1
4 GENERAL INFORMATION:
5 1 APPLICANT: Jones, Kenneth
6 2 APPLICANT: Lutz, Thomas
7 3 APPLICANT: Barowski, Rich
8 4 TITLE OF INVENTION: DNA encoding a GABAR2 polypeptide and uses thereof
9 5 FILE REFERENCE: 1795/4002DA
10 6 CURRENT APPLICATION NUMBER: US/09/818,879
11 7 CURRENT FILING DATE: 2001-03-27
12 8 PRIOR APPLICATION NUMBER: US 09/211,755
13 9 PRIOR FILING DATE: 1998-12-15
14 10 NUMBER OF SEQ ID NOS: 65
15 11 SOFTWARE: Patent In version 3.0
16 12 SEQ ID No 6
17 13 LENGTH: 45
18 14 TYPE: DNA
19 15 ORGANISM: Artificial/Unknown
20 16 FEATURE:
21 17 NAME/KEY: misc feature
22 18 LOCATION: C..C
23 19 OTHER INFORMATION: patent
24 US-09,818,879_6

```

| Query Match | Score | Length |
|-------------|-------|--------|
| Best Local  | 82.4% | 100    |
| Similarity  | 61.0% | 45     |
| Match       | 14.1% | 100    |

[illegible]

Wed Mar 19 09:05:29 2003

```

RESULT 24
US-09-211 755B-6
: Sequence 6: Application US/09/211755B
: Patent No. US20020045742A1
: GENERAL INFORMATION:
: APPLICANT: Kenneth A. Jones, Thomas M. Jaz, Beth Berowsky
: TITLE OF INVENTION: DNA Encoding a GAAAGGZ Polypeptide And Uses Thereof
: FILE REFERENCE: 1795/54002-0
: CURRENT APPLICATION NUMBER: US/09/211,755B
: CURRENT FILING DATE: 1998-12-15
: PRIOR APPLICATION NUMBER: 09/186,664
: PRIOR FILING DATE: 1998-11-04
: NUMBER OF SEQ ID NOS: 56
: SOFTWARE: Patent In Version 4.1
: SEQ ID NO 6
: LENGTH: 45
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Probe
US-09-211 755B-6

Query Match: 61.0%; Score 12.2; DB 13; Length 45;
Best Local Similarity: 82.4%; Pred. No. 6, Acc-04;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAAAGGZTCGTCG 20
DB 7 GAAAGGZTCGTCG 24

RESULT 25
US-09-918 156 59/c
: Sequence 59: Application US/09/918156
: Publication No. US20000042016A1
: GENERAL INFORMATION:
: APPLICANT: Barany, Francis
: APPLICANT: Lubin, Matthew
: TITLE OF INVENTION: DETECTION OF NUCLEIC ACID SEQUENCE DIFFERENCES USING
: FILE REFERENCE: 19603/441
: CURRENT APPLICATION NUMBER: US/09/918,156
: CURRENT FILING DATE: 2001-07-30
: PRIOR APPLICATION NUMBER: 09/918,156
: PRIOR FILING DATE: 2001-01-30
: NUMBER OF SEQ ID NOS: 76
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 59
: LENGTH: 48
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-918 156 59

Query Match: 61.0%; Score 12.2; DB 9; Length 48;
Best Local Similarity: 82.4%; Pred. No. 7, Acc-03;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5 AAGAGTCTCTTCGTC 19
DB 4 AAGAGTCTCTTCGTC 29

Search completed: March 18, 2003, 13:29:22
Job time: 146.1148 secs

```





GenScore version 5.1.4\_p5\_4578  
Copyright (c) 1993 - 2003 Computer 103.

EM nucleic acid search, using SW model

Run on: March 18, 2003, 10:40:51 : Search time 494.461 Seconds  
(without alignments)

1236.261 Million cell updates/sec

Title: us-09-900-115-2

Perfect score: 21

Sequence: 1 uacacatgacacaccccccct 21

Scoring table: IDENTITY NUC  
Gapop 10.0, Gapext 1.0

Searched: 2054640 seqs, 14551402878 residues

Total number of hits satisfying chosen parameters: 841850

Minimum hit seq length: 0

Maximum hit seq length: 50

Post processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

GenBank:

1: gb\_ba:\*  
2: gb\_hst:\*  
3: gb\_in:\*  
4: gb\_in:\*  
5: gb\_ov:\*  
6: gb\_ov:\*  
7: gb\_ph:\*  
8: gb\_pl:\*  
9: gb\_pl:\*  
10: gb\_ro:\*  
11: gb\_sts:\*  
12: gb\_sy:\*  
13: gb\_un:\*  
14: gb\_vi:\*  
15: em\_ba:\*  
16: em\_fun:\*  
17: em\_hum:\*  
18: em\_in:\*  
19: em\_mi:\*  
20: em\_mi:\*  
21: em\_mi:\*  
22: em\_mi:\*  
23: em\_mi:\*  
24: em\_mi:\*  
25: em\_mi:\*  
26: em\_mi:\*  
27: em\_mi:\*  
28: em\_mi:\*  
29: em\_mi:\*  
30: em\_mi:\*  
31: em\_mi:\*  
32: em\_mi:\*  
33: em\_mi:\*  
34: em\_mi:\*  
35: em\_mi:\*  
36: em\_mi:\*  
37: em\_mi:\*  
38: em\_mi:\*  
39: em\_mi:\*  
40: em\_mi:\*  
41: em\_mi:\*

Prod. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

# SUMMARIES

| Result No. | Score | Match | Length | DB | ID       | Description |
|------------|-------|-------|--------|----|----------|-------------|
| 1          | 14.8  | 70.5  | 20     | 6  | AR170368 | Sequence    |
| 2          | 14.2  | 67.6  | 46     | 6  | AR032657 | Sequence    |
| 3          | 14.2  | 67.6  | 46     | 6  | AR209121 | Sequence    |
| 4          | 14.2  | 67.6  | 46     | 6  | 129397   | Sequence    |
| 5          | 14.2  | 67.6  | 46     | 6  | 191071   | Sequence    |
| 6          | 13.8  | 65.7  | 28     | 6  | E35104   | Truncated   |
| 7          | 13.8  | 65.7  | 40     | 6  | A48364   | Sequence    |
| 8          | 13.8  | 65.7  | 43     | 6  | AR174752 | Sequence    |
| 9          | 13.6  | 64.8  | 50     | 9  | HSRLX1A1 | H. sapiens  |
| 10         | 13.4  | 63.8  | 21     | 6  | AX033541 | Sequence    |
| 11         | 13.2  | 62.9  | 23     | 6  | AX035620 | Sequence    |
| 12         | 13.2  | 62.9  | 25     | 6  | E11411   | Primer      |
| 13         | 13.2  | 62.9  | 27     | 6  | AR091539 | Sequence    |
| 14         | 13.2  | 62.9  | 27     | 6  | AR102242 | Sequence    |
| 15         | 13.2  | 62.9  | 40     | 6  | AX280561 | Sequence    |
| 16         | 13.2  | 62.9  | 41     | 6  | A00475   | Nucleot     |
| 17         | 13.2  | 62.9  | 41     | 6  | A00479   | Nucleot     |
| 18         | 13.2  | 62.9  | 45     | 6  | A00476   | Nucleot     |
| 19         | 13.2  | 62.9  | 45     | 6  | A00480   | Nucleot     |
| 20         | 13.2  | 62.9  | 48     | 6  | AX088738 | Sequence    |
| 21         | 13.2  | 62.9  | 42     | 6  | AR162155 | Sequence    |
| 22         | 13    | 61.9  | 25     | 6  | AR097431 | Sequence    |
| 23         | 13    | 61.9  | 28     | 6  | AR058910 | Sequence    |
| 24         | 13    | 61.9  | 28     | 6  | 136271   | Sequence    |
| 25         | 13    | 61.9  | 33     | 6  | A76106   | Sequence    |
| 26         | 12.8  | 61.0  | 19     | 6  | AX347976 | Sequence    |
| 27         | 12.8  | 61.0  | 24     | 6  | AX488595 | Sequence    |
| 28         | 12.8  | 61.0  | 33     | 6  | AX026022 | Sequence    |
| 29         | 12.6  | 60.0  | 32     | 6  | AX079038 | Sequence    |
| 30         | 12.6  | 60.0  | 39     | 6  | AR142764 | Sequence    |
| 31         | 12.6  | 60.0  | 40     | 6  | 101689   | Sequence    |
| 32         | 12.6  | 60.0  | 50     | 6  | AX279663 | Sequence    |
| 33         | 12.6  | 60.0  | 50     | 6  | AX286287 | Sequence    |
| 34         | 12.4  | 59.0  | 17     | 6  | AR164582 | Sequence    |
| 35         | 12.4  | 59.0  | 18     | 6  | AX207163 | Sequence    |
| 36         | 12.4  | 59.0  | 24     | 6  | AR127407 | Sequence    |
| 37         | 12.4  | 59.0  | 24     | 6  | AX445267 | Sequence    |
| 38         | 12.4  | 59.0  | 25     | 6  | AR094680 | Sequence    |
| 39         | 12.4  | 59.0  | 25     | 6  | AR202372 | Sequence    |
| 40         | 12.4  | 59.0  | 31     | 6  | AR084474 | Sequence    |
| 41         | 12.4  | 59.0  | 31     | 6  | AR172373 | Sequence    |
| 42         | 12.4  | 59.0  | 31     | 6  | AX248931 | Sequence    |
| 43         | 12.4  | 59.0  | 31     | 6  | AX249175 | Sequence    |
| 44         | 12.2  | 58.1  | 23     | 6  | AX062252 | Sequence    |
| 45         | 12.2  | 58.1  | 24     | 6  | AX074260 | Sequence    |
| 46         | 12.2  | 58.1  | 25     | 6  | E29099   | Neuronal    |
| 47         | 12.2  | 58.1  | 26     | 6  | AX037777 | Sequence    |
| 48         | 12.2  | 58.1  | 40     | 6  | AX055052 | Sequence    |
| 49         | 12.2  | 58.1  | 31     | 6  | AX248331 | Sequence    |
| 50         | 12.2  | 58.1  | 35     | 6  | AR085280 | Sequence    |
| 51         | 12.2  | 58.1  | 35     | 6  | AR203428 | Sequence    |
| 52         | 12.2  | 58.1  | 35     | 6  | E22806   | Method      |
| 53         | 12.2  | 58.1  | 35     | 6  | 117711   | Sequence    |
| 54         | 12.2  | 58.1  | 35     | 6  | 138623   | Sequence    |
| 55         | 12.2  | 58.1  | 39     | 6  | AX172226 | Sequence    |
| 56         | 12.2  | 58.1  | 40     | 6  | AR46133  | Sequence    |
| 57         | 12.2  | 58.1  | 44     | 10 | 805131JH | Mus muscu   |
| 58         | 12    | 57.1  | 21     | 6  | AX154123 | Sequence    |
| 59         | 12    | 57.1  | 23     | 6  | AR177809 | Sequence    |
| 60         | 12    | 57.1  | 26     | 6  | AR097423 | Sequence    |
| 61         | 12    | 57.1  | 27     | 6  | AR044876 | Sequence    |
| 62         | 12    | 57.1  | 40     | 6  | AR083504 | Sequence    |
| 63         | 12    | 57.1  | 30     | 6  | AR108661 | Sequence    |
| 64         | 12    | 57.1  | 34     | 6  | A58939   | Sequence    |
| 65         | 12    | 57.1  | 34     | 6  | AR161631 | Sequence    |

|       |      |      |    |   |          |               |       |      |      |    |    |           |
|-------|------|------|----|---|----------|---------------|-------|------|------|----|----|-----------|
| 66    | 12   | 57.1 | 44 | 6 | AX106941 | Sequence      | 139   | 11.6 | 55.2 | 33 | 6  | 10003265  |
| 67    | 12   | 57.1 | 44 | 6 | AX147871 | Sequence      | 140   | 11.6 | 55.2 | 34 | 6  | AR007152  |
| 68    | 12   | 57.1 | 49 | 6 | AX4523   | Sequence 3    | c 141 | 11.6 | 55.2 | 35 | 6  | AX19420   |
| 69    | 12   | 57.1 | 49 | 6 | AR052462 | Sequence      | c 142 | 11.6 | 55.2 | 36 | 6  | AX19421   |
| 70    | 12   | 57.1 | 50 | 6 | AX15846  | Sequence      | 143   | 11.6 | 55.2 | 37 | 6  | AR088998  |
| 71    | 12   | 57.1 | 50 | 6 | AX199552 | Sequence      | 144   | 11.6 | 55.2 | 38 | 6  | AR179004  |
| 72    | 11.8 | 56.2 | 24 | 6 | AX180346 | Sequence      | c 145 | 11.6 | 55.2 | 39 | 6  | AR195161  |
| 73    | 11.8 | 56.2 | 24 | 6 | AX445621 | Sequence      | c 146 | 11.6 | 55.2 | 40 | 6  | AR195162  |
| 74    | 11.8 | 56.2 | 25 | 6 | AX144859 | Sequence      | c 147 | 11.6 | 55.2 | 41 | 6  | AX14442   |
| 75    | 11.8 | 56.2 | 25 | 6 | AX191949 | Sequence      | 148   | 11.6 | 55.2 | 42 | 6  | AX14443   |
| c 76  | 11.8 | 56.2 | 27 | 6 | AX299926 | Sequence      | 149   | 11.6 | 55.2 | 43 | 6  | AX17497   |
| 77    | 11.8 | 56.2 | 28 | 6 | AR094678 | Sequence      | 150   | 11.6 | 55.2 | 44 | 6  | AX15070   |
| 78    | 11.8 | 56.2 | 28 | 6 | AR202370 | Sequence      | 151   | 11.6 | 55.2 | 47 | 6  | AX117144  |
| c 79  | 11.8 | 56.2 | 30 | 6 | E24859   | Human crowd   | c 152 | 11.6 | 55.2 | 49 | 6  | AX463645  |
| c 80  | 11.8 | 56.2 | 31 | 6 | H0002418 | Group comp    | c 153 | 11.6 | 55.2 | 49 | 6  | AX463653  |
| c 81  | 11.8 | 56.2 | 36 | 6 | AX300067 | Sequence      | 154   | 11.6 | 55.2 | 40 | 6  | AR151101  |
| 82    | 11.8 | 56.2 | 36 | 6 | AX3486   | Synt helic 8  | c 155 | 11.6 | 55.2 | 40 | 6  | H0009819  |
| c 83  | 11.8 | 56.2 | 48 | 6 | AR182095 | Sequence      | c 156 | 11.6 | 55.2 | 42 | 6  | AX044129  |
| 84    | 11.8 | 56.2 | 48 | 6 | 142379   | Sequence 8    | 157   | 11.6 | 55.2 | 46 | 8  | MR16314   |
| 85    | 11.8 | 56.2 | 49 | 6 | AX058364 | Sequence      | c 158 | 11.6 | 55.2 | 47 | 6  | AX457445  |
| 86    | 11.8 | 56.2 | 42 | 6 | AR096540 | Sequence      | 159   | 11.6 | 55.2 | 48 | 6  | AX457448  |
| c 87  | 11.8 | 56.2 | 45 | 6 | AR184224 | Sequence      | c 160 | 11.6 | 55.2 | 48 | 10 | S67105    |
| c 88  | 11.8 | 56.2 | 45 | 6 | AR184345 | Sequence      | 161   | 11.6 | 55.2 | 49 | 6  | AX060057  |
| c 89  | 11.8 | 56.2 | 45 | 6 | AX127933 | Sequence      | 162   | 11.6 | 55.2 | 50 | 6  | AR160601  |
| c 90  | 11.8 | 56.2 | 47 | 6 | AX8847   | Sequence 1    | 163   | 11.6 | 55.2 | 50 | 6  | AX411553  |
| c 91  | 11.8 | 56.2 | 47 | 6 | AX8869   | Sequence 23   | c 164 | 11.6 | 55.2 | 50 | 6  | AX411554  |
| 92    | 11.8 | 56.2 | 47 | 6 | A74057   | Sequence 33   | 165   | 11.6 | 55.2 | 50 | 6  | 129948    |
| 93    | 11.8 | 56.2 | 47 | 6 | A74149   | Sequence 33   | 166   | 11.4 | 54.3 | 20 | 6  | AR143147  |
| 94    | 11.8 | 56.2 | 47 | 6 | AR013773 | Sequence      | 167   | 11.4 | 54.3 | 20 | 6  | EL2988    |
| 95    | 11.8 | 56.2 | 47 | 6 | AR126953 | Sequence      | c 168 | 11.4 | 54.3 | 20 | 6  | EL6109    |
| 96    | 11.8 | 56.2 | 47 | 6 | AR174698 | Sequence      | 169   | 11.4 | 54.3 | 20 | 6  | 188041    |
| c 97  | 11.8 | 56.2 | 48 | 6 | AX229503 | Sequence      | c 170 | 11.4 | 54.3 | 21 | 6  | AR067967  |
| c 98  | 11.6 | 55.2 | 20 | 6 | A90737   | Sequence 21   | c 171 | 11.4 | 54.3 | 21 | 6  | AR078922  |
| c 99  | 11.6 | 55.2 | 20 | 6 | AR100185 | Sequence      | c 172 | 11.4 | 54.3 | 21 | 6  | AR097716  |
| 100   | 11.6 | 55.2 | 20 | 6 | AR137875 | Sequence      | c 173 | 11.4 | 54.3 | 21 | 6  | AX096851  |
| 101   | 11.6 | 55.2 | 20 | 6 | AR139860 | Sequence      | c 174 | 11.4 | 54.3 | 21 | 6  | AX096852  |
| c 102 | 11.6 | 55.2 | 20 | 6 | AR163959 | Sequence      | c 175 | 11.4 | 54.3 | 21 | 6  | AX097101  |
| c 103 | 11.6 | 55.2 | 20 | 6 | AX294614 | Sequence 35   | 176   | 11.4 | 54.3 | 21 | 6  | 146656    |
| 104   | 11.6 | 55.2 | 20 | 6 | 177271   | Sequence      | 177   | 11.4 | 54.3 | 24 | 6  | AX239515  |
| 105   | 11.6 | 55.2 | 20 | 6 | 188038   | Sequence 16   | 178   | 11.4 | 54.3 | 25 | 6  | AX259437  |
| 106   | 11.6 | 55.2 | 21 | 6 | AX113542 | Sequence      | 179   | 11.4 | 54.3 | 28 | 6  | AX26389   |
| c 107 | 11.6 | 55.2 | 22 | 6 | AX060049 | Sequence      | c 180 | 11.4 | 54.3 | 29 | 6  | AX2465    |
| c 108 | 11.6 | 55.2 | 23 | 6 | AR087641 | Sequence      | 181   | 11.4 | 54.3 | 30 | 6  | AX044015  |
| 109   | 11.6 | 55.2 | 23 | 6 | AX046655 | Sequence      | 182   | 11.4 | 54.3 | 30 | 6  | AX427958  |
| c 110 | 11.6 | 55.2 | 24 | 6 | AR068134 | Sequence      | 183   | 11.4 | 54.3 | 30 | 6  | E9828     |
| c 111 | 11.6 | 55.2 | 24 | 6 | AX289226 | Sequence      | c 184 | 11.4 | 54.3 | 31 | 6  | AX13742   |
| c 112 | 11.6 | 55.2 | 24 | 6 | AX289981 | Sequence      | 185   | 11.4 | 54.3 | 31 | 6  | H0002857  |
| c 113 | 11.6 | 55.2 | 25 | 6 | AX022228 | Sequence      | 186   | 11.4 | 54.3 | 34 | 6  | AX140179  |
| c 114 | 11.6 | 55.2 | 25 | 6 | 111708   | Sequence 10   | c 187 | 11.4 | 54.3 | 35 | 6  | AX457029  |
| 115   | 11.6 | 55.2 | 26 | 6 | A90727   | Sequence 11   | 188   | 11.4 | 54.3 | 35 | 6  | AX457030  |
| 116   | 11.6 | 55.2 | 26 | 6 | AR202262 | Sequence      | 189   | 11.4 | 54.3 | 36 | 6  | AX114837  |
| 117   | 11.6 | 55.2 | 27 | 6 | AR021326 | Sequence      | c 190 | 11.4 | 54.3 | 38 | 6  | AR088491  |
| 118   | 11.6 | 55.2 | 28 | 6 | AR4369   | Sequence 84   | c 191 | 11.4 | 54.3 | 39 | 6  | AR182115  |
| 119   | 11.6 | 55.2 | 28 | 6 | AX427468 | Sequence      | c 192 | 11.4 | 54.3 | 39 | 6  | AX283704  |
| c 120 | 11.6 | 55.2 | 29 | 6 | A25221   | Kpm/LINE sp   | 193   | 11.4 | 54.3 | 40 | 6  | AR009486  |
| c 121 | 11.6 | 55.2 | 29 | 6 | AR125080 | Sequence      | c 194 | 11.4 | 54.3 | 41 | 6  | E41345    |
| c 122 | 11.6 | 55.2 | 29 | 6 | E09149   | Synt helic 19 | 195   | 11.4 | 54.3 | 42 | 9  | HS424213  |
| c 123 | 11.6 | 55.2 | 30 | 6 | AR160596 | Sequence      | c 196 | 11.4 | 54.3 | 45 | 6  | AX13745   |
| c 124 | 11.6 | 55.2 | 30 | 6 | AR162180 | Sequence      | c 197 | 11.4 | 54.3 | 45 | 6  | AX13745   |
| c 125 | 11.6 | 55.2 | 30 | 6 | AX060062 | Sequence      | 198   | 11.4 | 54.3 | 46 | 6  | AR032664  |
| c 126 | 11.6 | 55.2 | 30 | 6 | AX195432 | Sequence      | 199   | 11.4 | 54.3 | 46 | 6  | AR020428  |
| c 127 | 11.6 | 55.2 | 30 | 6 | 123774   | Sequence 10   | 200   | 11.4 | 54.3 | 46 | 6  | 129404    |
| c 128 | 11.6 | 55.2 | 30 | 6 | 176190   | Sequence 2    | 201   | 11.4 | 54.3 | 46 | 6  | 191078    |
| c 129 | 11.6 | 55.2 | 30 | 6 | 190086   | Sequence 10   | c 202 | 11.4 | 54.3 | 48 | 9  | HS4278635 |
| c 130 | 11.6 | 55.2 | 31 | 6 | AR007523 | Sequence      | 203   | 11.4 | 54.3 | 49 | 6  | AX13744   |
| c 131 | 11.6 | 55.2 | 31 | 6 | AR084089 | Sequence      | 204   | 11.4 | 54.3 | 49 | 6  | AX202672  |
| c 132 | 11.6 | 55.2 | 32 | 6 | E33463   | Novel mamu    | c 205 | 11.4 | 54.3 | 50 | 6  | AX157458  |
| c 133 | 11.6 | 55.2 | 32 | 6 | AR007154 | Sequence      | c 206 | 11.4 | 54.3 | 50 | 6  | AX162400  |
| c 134 | 11.6 | 55.2 | 32 | 6 | AR200547 | Sequence      | c 207 | 11.4 | 54.3 | 50 | 6  | AX165866  |
| c 135 | 11.6 | 55.2 | 33 | 6 | A59440   | Sequence 12   | 208   | 11.4 | 54.3 | 50 | 6  | AX202669  |
| c 136 | 11.6 | 55.2 | 33 | 6 | A59441   | Sequence 13   | 209   | 11.4 | 54.3 | 50 | 6  | AX202671  |
| c 137 | 11.6 | 55.2 | 33 | 6 | AX2294   | Sequence 13   | c 210 | 11.4 | 54.3 | 50 | 6  | 188023    |
| c 138 | 11.6 | 55.2 | 33 | 6 | AX363257 | Sequence      | 211   | 11.2 | 54.3 | 17 | 6  | AX272966  |

|          |              |
|----------|--------------|
| 10003265 | Therapont    |
| AR007152 | Sequence     |
| AX19420  | Sequence     |
| AX19421  | Sequence     |
| AR088998 | Sequence     |
| AR179004 | Sequence     |
| AR195161 | Sequence     |
| AR195162 | Sequence     |
| AX463645 | Sequence     |
| AX463653 | Sequence     |
| AR151101 | Sequence     |
| H0009819 | Avian pol    |
| AX044129 | Sequence     |
| X12480   | Yeast mltI   |
| AX457445 | Sequence     |
| AX457448 | Sequence     |
| S67105   | PCR V beta   |
| AX060057 | Sequence     |
| AR160601 | Sequence     |
| AX411553 | Sequence     |
| AX411554 | Sequence     |
| 129948   | Sequence 12  |
| AR143147 | Sequence     |
| EL2988   | Ant i source |
| EL6109   | PCR primer   |
| 188041   | Sequence 19  |
| AR067967 | Sequence     |
| AR078922 | Sequence     |
| AR097716 | Sequence     |
| AX096851 | Sequence     |
| AX096852 | Sequence     |
| AX097101 | Sequence     |
| 146656   | Sequence 63  |
| AX239515 | Sequence     |
| AX259437 | Sequence     |
| AX26389  | Linker Area  |
| AX2465   | Sequence 6   |
| AX044015 | Sequence     |
| AX427958 | Sequence     |
| E9828    | Mat Ex meta  |
| AX13742  | Sequence     |
| H0002857 | Gene comp    |
| AX140179 | Sequence     |
| AX457029 | Sequence     |
| AX457030 | Sequence     |
| AX114837 | Sequence     |
| AR088491 | Sequence     |
| AR182115 | Sequence     |
| AX283704 | Sequence     |
| AR009486 | Sequence     |
| E41345   | Protein for  |
| AX224213 | Home sapi    |
| AX13745  | Sequence     |
| AX13745  | Sequence     |
| AR032664 | Sequence     |
| AR020428 | Sequence     |
| 129404   | Sequence 27  |
| 191078   | Sequence 27  |
| AX13744  | Home sapi    |
| AX202672 | Sequence     |
| AX157458 | Sequence     |
| AX162400 | Sequence     |
| AX165866 | Sequence     |
| AX202669 | Sequence     |
| AX202671 | Sequence     |
| 188023   | Sequence 1   |
| AX272966 | Sequence     |

|       |      |      |    |   |          |             |          |             |          |           |    |
|-------|------|------|----|---|----------|-------------|----------|-------------|----------|-----------|----|
| c 212 | 11.2 | 53.3 | 17 | 6 | AX475592 | Sequence    | AX475592 | Sequence    | 182859   | Sequence  | 48 |
| c 213 | 11.2 | 53.3 | 17 | 6 | AX475593 | Sequence    | AX475593 | Sequence    | 192722   | Sequence  | 48 |
| c 214 | 11.2 | 53.3 | 18 | 6 | AK042295 | Sequence    | AK042295 | Sequence    | AX57927  | Sequence  | 48 |
| c 215 | 11.2 | 53.3 | 18 | 6 | AK196142 | Sequence    | AK196142 | Sequence    | AK127595 | Sequence  | 48 |
| c 216 | 11.2 | 53.3 | 18 | 6 | AK202263 | Sequence    | AK202263 | Sequence    | AX469669 | Sequence  | 48 |
| c 217 | 11.2 | 53.3 | 18 | 6 | AX453424 | Sequence    | AX453424 | Sequence    | 175264   | Sequence  | 48 |
| c 218 | 11.2 | 53.3 | 20 | 6 | AK150409 | Sequence    | AK150409 | Sequence    | AX080992 | Sequence  | 48 |
| c 219 | 11.2 | 53.3 | 20 | 6 | AX201291 | Sequence    | AX201291 | Sequence    | E0701    | Primer    | 48 |
| c 220 | 11.2 | 53.3 | 20 | 6 | AX201727 | Sequence    | AX201727 | Sequence    | AX111480 | Sequence  | 48 |
| c 221 | 11.2 | 53.3 | 20 | 6 | AX294968 | Sequence    | AX294968 | Sequence    | AX214507 | Sequence  | 48 |
| c 222 | 11.2 | 53.3 | 20 | 6 | AX297479 | Sequence    | AX297479 | Sequence    | AX469966 | Sequence  | 48 |
| c 223 | 11.2 | 53.3 | 20 | 6 | AX463650 | Sequence    | AX463650 | Sequence    | BD009286 | Mutant    | 48 |
| c 224 | 11.2 | 53.3 | 20 | 6 | E38877   | Chimeric an | E38877   | Chimeric an | BD009295 | Mutant    | 48 |
| c 225 | 11.2 | 53.3 | 20 | 6 | 134916   | Sequence 2  | 134916   | Sequence 2  | BD009304 | Mutant    | 48 |
| c 226 | 11.2 | 53.3 | 21 | 6 | AX46466  | Sequence 4  | AX46466  | Sequence 4  | 114659   | Human     | 48 |
| c 227 | 11.2 | 53.3 | 21 | 6 | AB8115   | Sequence 26 | AB8115   | Sequence 26 | 104064   | Synthetic | 48 |
| c 228 | 11.2 | 53.3 | 21 | 6 | A90082   | Sequence 26 | A90082   | Sequence 26 | AS7156   | Sequence  | 48 |
| c 229 | 11.2 | 53.3 | 21 | 6 | AK020178 | Sequence    | AK020178 | Sequence    | AR099415 | Sequence  | 48 |
| c 230 | 11.2 | 53.3 | 21 | 6 | AK086618 | Sequence    | AK086618 | Sequence    | AR179722 | Sequence  | 48 |
| c 231 | 11.2 | 53.3 | 21 | 6 | 125838   | Sequence 18 | 125838   | Sequence 18 | AX229197 | Sequence  | 48 |
| c 232 | 11.2 | 53.3 | 23 | 6 | AX180363 | Sequence    | AX180363 | Sequence    | AX229413 | Sequence  | 48 |
| c 233 | 11.2 | 53.3 | 23 | 6 | AX45839  | Sequence 9  | AX45839  | Sequence 9  | AF247876 | Human     | 48 |
| c 234 | 11.2 | 53.3 | 24 | 6 | AK047449 | Sequence    | AK047449 | Sequence    | AF247876 | Human     | 48 |
| c 235 | 11.2 | 53.3 | 24 | 6 | AK074756 | Sequence    | AK074756 | Sequence    | AR118991 | Sequence  | 48 |
| c 236 | 11.2 | 53.3 | 24 | 6 | AK074891 | Sequence    | AK074891 | Sequence    | AR152127 | Sequence  | 48 |
| c 237 | 11.2 | 53.3 | 24 | 6 | AK081717 | Sequence    | AK081717 | Sequence    | AS1648   | Sequence  | 48 |
| c 238 | 11.2 | 53.3 | 24 | 6 | AK082487 | Sequence    | AK082487 | Sequence    | AR121268 | Sequence  | 48 |
| c 239 | 11.2 | 53.3 | 24 | 6 | AK124776 | Sequence    | AK124776 | Sequence    | 121493   | Sequence  | 48 |
| c 240 | 11.2 | 53.3 | 24 | 6 | AK149643 | Sequence    | AK149643 | Sequence    | AF247876 | Human     | 48 |
| c 241 | 11.2 | 53.3 | 24 | 6 | AK200337 | Sequence    | AK200337 | Sequence    | AR118991 | Sequence  | 48 |
| c 242 | 11.2 | 53.3 | 24 | 6 | AK046440 | Sequence    | AK046440 | Sequence    | AR152127 | Sequence  | 48 |
| c 243 | 11.2 | 53.3 | 24 | 6 | AX046448 | Sequence    | AX046448 | Sequence    | AS1648   | Sequence  | 48 |
| c 244 | 11.2 | 53.3 | 24 | 6 | AX290335 | Sequence    | AX290335 | Sequence    | AR121268 | Sequence  | 48 |
| c 245 | 11.2 | 53.3 | 24 | 6 | AX292745 | Sequence    | AX292745 | Sequence    | 121493   | Sequence  | 48 |
| c 246 | 11.2 | 53.3 | 24 | 6 | AX292745 | Sequence    | AX292745 | Sequence    | AF247876 | Human     | 48 |
| c 247 | 11.2 | 53.3 | 24 | 6 | BS274023 | Sequence    | BS274023 | Sequence    | AR118991 | Sequence  | 48 |
| c 248 | 11.2 | 53.3 | 25 | 6 | AX053297 | Sequence    | AX053297 | Sequence    | AR152127 | Sequence  | 48 |
| c 249 | 11.2 | 53.3 | 25 | 6 | AX476569 | Sequence    | AX476569 | Sequence    | AS1648   | Sequence  | 48 |
| c 250 | 11.2 | 53.3 | 25 | 6 | AX476570 | Sequence    | AX476570 | Sequence    | AR121268 | Sequence  | 48 |
| c 251 | 11.2 | 53.3 | 25 | 6 | AX476571 | Sequence    | AX476571 | Sequence    | 121493   | Sequence  | 48 |
| c 252 | 11.2 | 53.3 | 25 | 6 | AX476572 | Sequence    | AX476572 | Sequence    | AF247876 | Human     | 48 |
| c 253 | 11.2 | 53.3 | 25 | 6 | AX476573 | Sequence    | AX476573 | Sequence    | AR118991 | Sequence  | 48 |
| c 254 | 11.2 | 53.3 | 25 | 6 | AX476574 | Sequence    | AX476574 | Sequence    | AR152127 | Sequence  | 48 |
| c 255 | 11.2 | 53.3 | 25 | 6 | AX476575 | Sequence    | AX476575 | Sequence    | AS1648   | Sequence  | 48 |
| c 256 | 11.2 | 53.3 | 25 | 6 | AX476576 | Sequence    | AX476576 | Sequence    | AR121268 | Sequence  | 48 |
| c 257 | 11.2 | 53.3 | 25 | 6 | AX476577 | Sequence    | AX476577 | Sequence    | 121493   | Sequence  | 48 |
| c 258 | 11.2 | 53.3 | 25 | 6 | AX476578 | Sequence    | AX476578 | Sequence    | AF247876 | Human     | 48 |
| c 259 | 11.2 | 53.3 | 25 | 6 | E03516   | Sequence    | E03516   | Sequence    | AR118991 | Sequence  | 48 |
| c 260 | 11.2 | 53.3 | 25 | 6 | 140916   | Sequence 31 | 140916   | Sequence 31 | AR152127 | Sequence  | 48 |
| c 261 | 11.2 | 53.3 | 27 | 6 | AK194742 | Sequence    | AK194742 | Sequence    | AS1648   | Sequence  | 48 |
| c 262 | 11.2 | 53.3 | 28 | 6 | AK016677 | Sequence    | AK016677 | Sequence    | AR121268 | Sequence  | 48 |
| c 263 | 11.2 | 53.3 | 28 | 6 | AK059711 | Sequence    | AK059711 | Sequence    | 121493   | Sequence  | 48 |
| c 264 | 11.2 | 53.3 | 28 | 6 | AK098071 | Sequence    | AK098071 | Sequence    | AF247876 | Human     | 48 |
| c 265 | 11.2 | 53.3 | 28 | 6 | 162292   | Sequence 16 | 162292   | Sequence 16 | AR118991 | Sequence  | 48 |
| c 266 | 11.2 | 53.3 | 29 | 6 | AK109234 | Sequence    | AK109234 | Sequence    | AR152127 | Sequence  | 48 |
| c 267 | 11.2 | 53.3 | 29 | 6 | 179759   | Sequence 32 | 179759   | Sequence 32 | AS1648   | Sequence  | 48 |
| c 268 | 11.2 | 53.3 | 30 | 6 | AX225248 | Sequence    | AX225248 | Sequence    | AR121268 | Sequence  | 48 |
| c 269 | 11.2 | 53.3 | 30 | 6 | AX431449 | Sequence    | AX431449 | Sequence    | 121493   | Sequence  | 48 |
| c 270 | 11.2 | 53.3 | 30 | 6 | AX474226 | Sequence    | AX474226 | Sequence    | AF247876 | Human     | 48 |
| c 271 | 11.2 | 53.3 | 30 | 6 | E04099   | qDNA encodi | E04099   | qDNA encodi | AR118991 | Sequence  | 48 |
| c 272 | 11.2 | 53.3 | 31 | 6 | AK206884 | Sequence    | AK206884 | Sequence    | AR152127 | Sequence  | 48 |
| c 273 | 11.2 | 53.3 | 31 | 6 | AX249341 | Sequence    | AX249341 | Sequence    | AS1648   | Sequence  | 48 |
| c 274 | 11.2 | 53.3 | 33 | 6 | A11505   | Synthetic   | A11505   | Synthetic   | AR121268 | Sequence  | 48 |
| c 275 | 11.2 | 53.3 | 33 | 6 | AK004384 | Sequence    | AK004384 | Sequence    | 121493   | Sequence  | 48 |
| c 276 | 11.2 | 53.3 | 33 | 6 | AK004760 | Sequence    | AK004760 | Sequence    | AF247876 | Human     | 48 |
| c 277 | 11.2 | 53.3 | 33 | 6 | AK062477 | Sequence    | AK062477 | Sequence    | AR118991 | Sequence  | 48 |
| c 278 | 11.2 | 53.3 | 33 | 6 | AK067943 | Sequence    | AK067943 | Sequence    | AR152127 | Sequence  | 48 |
| c 279 | 11.2 | 53.3 | 33 | 6 | AK069589 | Sequence    | AK069589 | Sequence    | AS1648   | Sequence  | 48 |
| c 280 | 11.2 | 53.3 | 33 | 6 | AK092175 | Sequence    | AK092175 | Sequence    | AR121268 | Sequence  | 48 |
| c 281 | 11.2 | 53.3 | 33 | 6 | AK130673 | Sequence    | AK130673 | Sequence    | 121493   | Sequence  | 48 |
| c 282 | 11.2 | 53.3 | 33 | 6 | AK166792 | Sequence    | AK166792 | Sequence    | AF247876 | Human     | 48 |
| c 283 | 11.2 | 53.3 | 33 | 6 | AK172022 | Sequence    | AK172022 | Sequence    | AR118991 | Sequence  | 48 |
| c 284 | 11.2 | 53.3 | 33 | 6 | E41685   | Process for | E41685   | Process for | AR152127 | Sequence  | 48 |
| c 285 | 11.2 | 53.3 | 33 | 6 | 125003   | Sequence 38 | 125003   | Sequence 38 | AS1648   | Sequence  | 48 |

|       |    |      |    |   |          |                   |        |      |      |    |    |                    |
|-------|----|------|----|---|----------|-------------------|--------|------|------|----|----|--------------------|
| c 358 | 11 | 52.4 | 27 | 6 | AR075207 | AR075207 Sequence | 4.41   | 11   | 52.4 | 50 | 6  | AR209582           |
| c 359 | 11 | 52.4 | 27 | 6 | AR150678 | AR150678 Sequence | 4.42   | 11   | 52.4 | 50 | 6  | 129658             |
| c 360 | 11 | 52.4 | 27 | 6 | AR152619 | AR152619 Sequence | 4.43   | 11   | 52.4 | 50 | 6  | 191532 Sequence 53 |
| c 361 | 11 | 52.4 | 27 | 6 | AX343300 | Sequence          | c 4.44 | 10.8 | 51.4 | 14 | 6  | 165572             |
| c 362 | 11 | 52.4 | 27 | 6 | E16227   | Primer : 7/1      | c 4.45 | 10.8 | 51.4 | 16 | 6  | 165572             |
| c 363 | 11 | 52.4 | 27 | 6 | E27239   | Novel : phys      | 4.46   | 10.8 | 51.4 | 17 | 6  | AR001097           |
| c 364 | 11 | 52.4 | 27 | 6 | E28411   | in 111271         | 4.47   | 10.8 | 51.4 | 17 | 6  | AR027463           |
| c 365 | 11 | 52.4 | 27 | 6 | 158566   | Sequence 41       | 4.48   | 10.8 | 51.4 | 17 | 6  | AR058272           |
| c 366 | 11 | 52.4 | 27 | 6 | 161241   | Sequence 48       | 4.49   | 10.8 | 51.4 | 17 | 6  | AR169476           |
| c 367 | 11 | 52.4 | 28 | 6 | A00054   | Nucleot ide       | c 4.49 | 10.8 | 51.4 | 17 | 6  | AR175594           |
| c 368 | 11 | 52.4 | 28 | 6 | AR161776 | Sequence          | c 4.41 | 10.8 | 51.4 | 17 | 6  | AR375595           |
| c 369 | 11 | 52.4 | 28 | 6 | AR199381 | Sequence          | 4.42   | 10.8 | 51.4 | 17 | 6  | 118529             |
| c 370 | 11 | 52.4 | 28 | 6 | AX024945 | Sequence          | 4.43   | 10.8 | 51.4 | 17 | 6  | 166629             |
| c 371 | 11 | 52.4 | 29 | 6 | AX005872 | Sequence          | 4.44   | 10.8 | 51.4 | 17 | 6  | 188804             |
| c 372 | 11 | 52.4 | 31 | 6 | A64415   | Sequence 28       | 4.45   | 10.8 | 51.4 | 18 | 6  | AR106194           |
| c 373 | 11 | 52.4 | 31 | 6 | AR009612 | Sequence          | 4.46   | 10.8 | 51.4 | 18 | 6  | AR131286           |
| c 374 | 11 | 52.4 | 31 | 6 | AR046988 | Sequence          | 4.47   | 10.8 | 51.4 | 19 | 6  | AX057447           |
| c 375 | 11 | 52.4 | 31 | 6 | AR071721 | Sequence          | 4.48   | 10.8 | 51.4 | 20 | 6  | AX391532           |
| c 376 | 11 | 52.4 | 31 | 6 | AX249503 | Sequence          | 4.49   | 10.8 | 51.4 | 20 | 6  | AX419502           |
| c 377 | 11 | 52.4 | 31 | 6 | AX343807 | Sequence          | 4.50   | 10.8 | 51.4 | 20 | 6  | 10013149           |
| c 378 | 11 | 52.4 | 33 | 6 | AR016004 | Sequence          | c 4.51 | 10.8 | 51.4 | 20 | 6  | E26656             |
| c 379 | 11 | 52.4 | 33 | 6 | AR051090 | Sequence          | 4.52   | 10.8 | 51.4 | 20 | 24 | 10010177           |
| c 380 | 11 | 52.4 | 33 | 6 | AX044851 | Sequence          | c 4.53 | 10.8 | 51.4 | 21 | 6  | A25398             |
| c 381 | 11 | 52.4 | 33 | 6 | 138462   | Sequence 28       | 4.54   | 10.8 | 51.4 | 21 | 6  | A25416             |
| c 382 | 11 | 52.4 | 34 | 6 | AR087806 | Sequence          | c 4.55 | 10.8 | 51.4 | 24 | 6  | A08882             |
| c 383 | 11 | 52.4 | 34 | 6 | AR159650 | Sequence          | c 4.56 | 10.8 | 51.4 | 24 | 6  | AX298858           |
| c 384 | 11 | 52.4 | 34 | 6 | AX250305 | Sequence          | 4.57   | 10.8 | 51.4 | 24 | 6  | E15489             |
| c 385 | 11 | 52.4 | 35 | 6 | AX024676 | Sequence          | c 4.58 | 10.8 | 51.4 | 24 | 6  | 151987             |
| c 386 | 11 | 52.4 | 36 | 6 | AR026904 | Sequence          | c 4.59 | 10.8 | 51.4 | 24 | 6  | 158361             |
| c 387 | 11 | 52.4 | 36 | 6 | AR049330 | Sequence          | 4.60   | 10.8 | 51.4 | 24 | 9  | S81360             |
| c 388 | 11 | 52.4 | 36 | 6 | AR065588 | Sequence          | c 4.61 | 10.8 | 51.4 | 24 | 10 | AR015845           |
| c 389 | 11 | 52.4 | 36 | 6 | AX018520 | Sequence          | 4.62   | 10.8 | 51.4 | 25 | 6  | AR099452           |
| c 390 | 11 | 52.4 | 36 | 6 | AX018596 | Sequence          | c 4.63 | 10.8 | 51.4 | 25 | 6  | AX476579           |
| c 391 | 11 | 52.4 | 36 | 6 | 108839   | Sequence 8        | c 4.64 | 10.8 | 51.4 | 25 | 6  | AX476580           |
| c 392 | 11 | 52.4 | 37 | 6 | AR041398 | Sequence          | c 4.65 | 10.8 | 51.4 | 26 | 6  | AR064131           |
| c 393 | 11 | 52.4 | 37 | 6 | AR085017 | Sequence          | 4.66   | 10.8 | 51.4 | 27 | 6  | A59061             |
| c 394 | 11 | 52.4 | 37 | 6 | 176327   | Sequence 9        | c 4.67 | 10.8 | 51.4 | 27 | 6  | AR040277           |
| c 395 | 11 | 52.4 | 38 | 6 | A59046   | Sequence 34       | 4.68   | 10.8 | 51.4 | 27 | 6  | E09860             |
| c 396 | 11 | 52.4 | 38 | 6 | AR048225 | Sequence          | c 4.69 | 10.8 | 51.4 | 28 | 6  | A40393             |
| c 397 | 11 | 52.4 | 38 | 6 | AR138739 | Sequence          | 4.70   | 10.8 | 51.4 | 28 | 6  | AR123907           |
| c 398 | 11 | 52.4 | 38 | 6 | AX218383 | Sequence          | 4.71   | 10.8 | 51.4 | 28 | 6  | AR156448           |
| c 399 | 11 | 52.4 | 39 | 5 | HF1613V  | Sequence          | 4.72   | 10.8 | 51.4 | 28 | 6  | AR156448           |
| c 400 | 11 | 52.4 | 39 | 5 | HF1628V  | Sequence          | c 4.73 | 10.8 | 51.4 | 29 | 6  | AX016309           |
| c 401 | 11 | 52.4 | 40 | 6 | AX037666 | Sequence          | c 4.74 | 10.8 | 51.4 | 29 | 6  | A19665             |
| c 402 | 11 | 52.4 | 40 | 6 | AX037667 | Sequence          | 4.75   | 10.8 | 51.4 | 29 | 6  | A29722             |
| c 403 | 11 | 52.4 | 40 | 6 | AX080992 | Sequence          | c 4.76 | 10.8 | 51.4 | 29 | 6  | AX174690           |
| c 404 | 11 | 52.4 | 40 | 6 | AX207596 | Sequence          | 4.77   | 10.8 | 51.4 | 30 | 6  | 165571             |
| c 405 | 11 | 52.4 | 41 | 6 | AR2526   | Sequence 29       | c 4.78 | 10.8 | 51.4 | 30 | 6  | A25936             |
| c 406 | 11 | 52.4 | 41 | 6 | AR141313 | Sequence          | c 4.79 | 10.8 | 51.4 | 30 | 6  | AR060299           |
| c 407 | 11 | 52.4 | 41 | 6 | AX357287 | Sequence          | c 4.80 | 10.8 | 51.4 | 30 | 6  | AX138053           |
| c 408 | 11 | 52.4 | 42 | 6 | AX044129 | Sequence          | 4.81   | 10.8 | 51.4 | 30 | 6  | AX166282           |
| c 409 | 11 | 52.4 | 42 | 6 | AX418192 | Sequence          | c 4.82 | 10.8 | 51.4 | 30 | 6  | AX391536           |
| c 410 | 11 | 52.4 | 42 | 6 | AX418193 | Sequence          | c 4.83 | 10.8 | 51.4 | 30 | 6  | E26599             |
| c 411 | 11 | 52.4 | 45 | 6 | 116165   | Sequence 16       | 4.84   | 10.8 | 51.4 | 30 | 6  | E31822             |
| c 412 | 11 | 52.4 | 45 | 6 | 125444   | Sequence 4        | c 4.85 | 10.8 | 51.4 | 30 | 6  | 105771             |
| c 413 | 11 | 52.4 | 46 | 6 | A59045   | Sequence 33       | c 4.86 | 10.8 | 51.4 | 30 | 6  | 120959             |
| c 414 | 11 | 52.4 | 46 | 6 | AX403519 | Sequence          | c 4.87 | 10.8 | 51.4 | 30 | 6  | 192450             |
| c 415 | 11 | 52.4 | 47 | 6 | AR062260 | Sequence          | c 4.88 | 10.8 | 51.4 | 31 | 6  | 192455             |
| c 416 | 11 | 52.4 | 47 | 6 | AR062260 | Sequence          | 4.89   | 10.8 | 51.4 | 31 | 6  | AX248501           |
| c 417 | 11 | 52.4 | 47 | 6 | AR062261 | Sequence          | 4.90   | 10.8 | 51.4 | 31 | 6  | AX249214           |
| c 418 | 11 | 52.4 | 47 | 6 | AR062261 | Sequence          | c 4.91 | 10.8 | 51.4 | 31 | 6  | AX249533           |
| c 419 | 11 | 52.4 | 47 | 6 | AX418188 | Sequence          | 4.92   | 10.8 | 51.4 | 32 | 6  | E10693             |
| c 420 | 11 | 52.4 | 47 | 6 | AX418189 | Sequence          | 4.93   | 10.8 | 51.4 | 32 | 6  | 124545             |
| c 421 | 11 | 52.4 | 48 | 6 | AR073450 | Sequence          | 4.94   | 10.8 | 51.4 | 32 | 6  | 134887             |
| c 422 | 11 | 52.4 | 48 | 6 | AR194385 | Sequence          | c 4.95 | 10.8 | 51.4 | 33 | 6  | 183678             |
| c 423 | 11 | 52.4 | 48 | 6 | AX221675 | Sequence          | 4.96   | 10.8 | 51.4 | 34 | 6  | AX047006           |
| c 424 | 11 | 52.4 | 48 | 6 | AX229412 | Sequence          | c 4.97 | 10.8 | 51.4 | 34 | 6  | AR016345           |
| c 425 | 11 | 52.4 | 49 | 6 | AR3844   | Sequence 3        | 4.98   | 10.8 | 51.4 | 36 | 6  | A19413             |
| c 426 | 11 | 52.4 | 49 | 6 | AX278760 | Sequence          | c 4.99 | 10.8 | 51.4 | 36 | 6  | A19414             |
| c 427 | 11 | 52.4 | 49 | 6 | AX279615 | Sequence          | c 5.00 | 10.8 | 51.4 | 36 | 6  | A62550             |
| c 428 | 11 | 52.4 | 49 | 6 | AX279670 | Sequence          | c 5.01 | 10.8 | 51.4 | 36 | 6  | A62551             |
| c 429 | 11 | 52.4 | 49 | 6 | AX279927 | Sequence          | c 5.02 | 10.8 | 51.4 | 36 | 6  | A62552             |
| c 430 | 11 | 52.4 | 50 | 6 | AR032918 | Sequence          | c 5.03 | 10.8 | 51.4 | 36 | 6  | AR112807           |

|       |      |      |    |   |            |                      |       |      |      |    |    |           |                     |
|-------|------|------|----|---|------------|----------------------|-------|------|------|----|----|-----------|---------------------|
| c 504 | 10.8 | 51.4 | 36 | 6 | AR195157   | AR195157 Sequence    | c 577 | 10.6 | 50.5 | 24 | 6  | AX463104  | AX463104 Sequence   |
| 505   | 10.8 | 51.4 | 36 | 6 | AR195158   | AR195158 Sequence    | 578   | 10.6 | 50.5 | 24 | 6  | AX098276  | AX098276 Sequence   |
| 506   | 10.8 | 51.4 | 36 | 6 | B0007245   | B0007245 Nov-1 flt   | c 579 | 10.6 | 50.5 | 24 | 6  | AX192172  | AX192172 Sequence   |
| c 507 | 10.8 | 51.4 | 36 | 6 | 113438     | 113438 Sequence 41   | c 580 | 10.6 | 50.5 | 24 | 6  | AX292495  | AX292495 Sequence   |
| c 508 | 10.8 | 51.4 | 36 | 6 | 113439     | 113439 Sequence 42   | c 581 | 10.6 | 50.5 | 24 | 6  | AX292512  | AX292512 Sequence   |
| c 509 | 10.8 | 51.4 | 38 | 6 | AR000588   | AR000588 Sequence    | c 582 | 10.6 | 50.5 | 24 | 6  | AX292516  | AX292516 Sequence   |
| 510   | 10.8 | 51.4 | 38 | 6 | AR024260   | AR024260 Sequence    | c 583 | 10.6 | 50.5 | 24 | 6  | AX292524  | AX292524 Sequence   |
| 511   | 10.8 | 51.4 | 38 | 6 | AR025928   | AR025928 Sequence    | c 584 | 10.6 | 50.5 | 24 | 6  | AX292530  | AX292530 Sequence   |
| 512   | 10.8 | 51.4 | 38 | 6 | AR045113   | AR045113 Sequence    | 585   | 10.6 | 50.5 | 24 | 6  | AX451724  | AX451724 Sequence   |
| 513   | 10.8 | 51.4 | 38 | 6 | AR091814   | AR091814 Sequence    | 586   | 10.6 | 50.5 | 24 | 6  | 168927    | 168927 Sequence 19  |
| 514   | 10.8 | 51.4 | 38 | 6 | AR157722   | AR157722 Sequence    | c 587 | 10.6 | 50.5 | 24 | 6  | 169273    | 169273 Sequence 54  |
| c 515 | 10.8 | 51.4 | 38 | 6 | AR208901   | AR208901 Sequence    | c 588 | 10.6 | 50.5 | 25 | 6  | AR32003   | AR32003 primer (124 |
| 516   | 10.8 | 51.4 | 38 | 6 | AX201776   | AX201776 Sequence    | 589   | 10.6 | 50.5 | 25 | 6  | AR141421  | AR141421 Sequence   |
| 517   | 10.8 | 51.4 | 38 | 6 | B0011337   | B0011337 Chimeric    | 590   | 10.6 | 50.5 | 25 | 6  | AR148147  | AR148147 Sequence   |
| 518   | 10.8 | 51.4 | 38 | 6 | E05404     | E05404 DNA sequence  | c 591 | 10.6 | 50.5 | 25 | 6  | AX279014  | AX279014 Sequence   |
| 519   | 10.8 | 51.4 | 38 | 6 | F43807     | F43807 ChimERIC an   | c 592 | 10.6 | 50.5 | 25 | 6  | AX279029  | AX279029 Sequence   |
| 520   | 10.8 | 51.4 | 38 | 6 | 130287     | 130287 Sequence 37   | 593   | 10.6 | 50.5 | 26 | 6  | AR000169  | AR000169 Sequence   |
| 521   | 10.8 | 51.4 | 39 | 6 | AX006837   | AX006837 Sequence    | 594   | 10.6 | 50.5 | 26 | 6  | AR074609  | AR074609 Sequence   |
| 522   | 10.8 | 51.4 | 40 | 6 | A66387     | A66387 Sequence 31   | 595   | 10.6 | 50.5 | 26 | 6  | AR082406  | AR082406 Sequence   |
| c 523 | 10.8 | 51.4 | 40 | 6 | 115906     | 115906 Sequence 7    | 596   | 10.6 | 50.5 | 26 | 6  | AR142099  | AR142099 Sequence   |
| c 524 | 10.8 | 51.4 | 40 | 6 | 124546     | 124546 Sequence 26   | 597   | 10.6 | 50.5 | 26 | 6  | AR151424  | AR151424 Sequence   |
| c 525 | 10.8 | 51.4 | 40 | 6 | 133888     | 133888 Sequence 27   | 598   | 10.6 | 50.5 | 26 | 6  | AR157417  | AR157417 Sequence   |
| c 526 | 10.8 | 51.4 | 40 | 6 | 183679     | 183679 Sequence 8    | 599   | 10.6 | 50.5 | 26 | 6  | AR161626  | AR161626 Sequence   |
| c 527 | 10.8 | 51.4 | 40 | 6 | 196105     | 196105 Sequence 7    | 600   | 10.6 | 50.5 | 26 | 6  | AR161627  | AR161627 Sequence   |
| c 528 | 10.8 | 51.4 | 41 | 6 | A82505     | A82505 Sequence 8    | 601   | 10.6 | 50.5 | 26 | 6  | AR162179  | AR162179 Sequence   |
| 529   | 10.8 | 51.4 | 42 | 6 | A16134     | A16134 polylinker    | 602   | 10.6 | 50.5 | 26 | 6  | AX033901  | AX033901 Sequence   |
| 530   | 10.8 | 51.4 | 42 | 6 | AR058951   | AR058951 Sequence    | c 603 | 10.6 | 50.5 | 26 | 6  | AX183975  | AX183975 Sequence   |
| 531   | 10.8 | 51.4 | 42 | 6 | AR105225   | AR105225 Sequence    | 604   | 10.6 | 50.5 | 26 | 6  | AX354325  | AX354325 Sequence   |
| 532   | 10.8 | 51.4 | 42 | 6 | AR119146   | AR119146 Sequence    | c 605 | 10.6 | 50.5 | 26 | 6  | AX356579  | AX356579 Sequence   |
| 533   | 10.8 | 51.4 | 42 | 6 | AR125517   | AR125517 Sequence    | c 606 | 10.6 | 50.5 | 26 | 6  | AX356580  | AX356580 Sequence   |
| 534   | 10.8 | 51.4 | 42 | 6 | AR138170   | AR138170 Sequence    | c 607 | 10.6 | 50.5 | 26 | 6  | AX362561  | AX362561 Sequence   |
| 535   | 10.8 | 51.4 | 42 | 6 | AR176731   | AR176731 Sequence    | c 608 | 10.6 | 50.5 | 26 | 6  | AX362562  | AX362562 Sequence   |
| 536   | 10.8 | 51.4 | 42 | 6 | AR198302   | AR198302 Sequence    | 609   | 10.6 | 50.5 | 26 | 6  | AX374668  | AX374668 Sequence   |
| 537   | 10.8 | 51.4 | 42 | 6 | AX145606   | AX145606 Sequence    | 610   | 10.6 | 50.5 | 26 | 6  | 123773    | 123773 Sequence 9   |
| c 538 | 10.8 | 51.4 | 42 | 6 | AX145607   | AX145607 Sequence    | 611   | 10.6 | 50.5 | 26 | 6  | 176189    | 176189 Sequence 1   |
| c 539 | 10.8 | 51.4 | 42 | 6 | AX297693   | AX297693 Sequence    | 612   | 10.6 | 50.5 | 26 | 6  | 190085    | 190085 Sequence 9   |
| 540   | 10.8 | 51.4 | 42 | 6 | AX469995   | AX469995 Sequence    | 613   | 10.6 | 50.5 | 27 | 6  | AR031642  | AR031642 Sequence   |
| 541   | 10.8 | 51.4 | 44 | 6 | A25947     | A25947 Synthetic o   | c 614 | 10.6 | 50.5 | 27 | 6  | AR079151  | AR079151 Sequence   |
| c 542 | 10.8 | 51.4 | 45 | 6 | AX080983   | AX080983 Sequence    | c 615 | 10.6 | 50.5 | 28 | 6  | AR140323  | AR140323 Sequence   |
| 543   | 10.8 | 51.4 | 46 | 6 | AR018079   | AR018079 Sequence    | c 616 | 10.6 | 50.5 | 28 | 6  | AX099886  | AX099886 Sequence   |
| 544   | 10.8 | 51.4 | 46 | 6 | AR051919   | AR051919 Sequence    | c 617 | 10.6 | 50.5 | 28 | 6  | AX138007  | AX138007 Sequence   |
| c 545 | 10.8 | 51.4 | 46 | 6 | AR062167   | AR062167 Sequence    | c 618 | 10.6 | 50.5 | 29 | 6  | A25219    | A25219 Kpn/LINE SP  |
| c 546 | 10.8 | 51.4 | 46 | 6 | AR135143   | AR135143 Sequence    | c 619 | 10.6 | 50.5 | 29 | 6  | AR021325  | AR021325 Sequence   |
| 547   | 10.8 | 51.4 | 48 | 9 | HSTRK3X52  | 269504 H.sapiens m   | 620   | 10.6 | 50.5 | 29 | 6  | AR145878  | AR145878 Sequence   |
| 548   | 10.8 | 51.4 | 48 | 9 | 192353     | 192353 Sequence 5    | 621   | 10.6 | 50.5 | 29 | 6  | AR165346  | AR165346 Sequence   |
| c 549 | 10.8 | 51.4 | 49 | 6 | AX160730   | AX160730 Sequence    | c 622 | 10.6 | 50.5 | 29 | 6  | E09147    | E09147 Synthetic 10 |
| 550   | 10.8 | 51.4 | 50 | 6 | AX430850   | AX430850 Sequence    | 623   | 10.6 | 50.5 | 30 | 6  | A17648    | A17648 Nucleotide   |
| c 551 | 10.8 | 51.4 | 50 | 6 | AX430850   | AX430850 Sequence    | 624   | 10.6 | 50.5 | 30 | 6  | A69244    | A69244 Sequence 2   |
| 552   | 10.6 | 50.5 | 17 | 6 | AX215471   | AX215471 Sequence    | 625   | 10.6 | 50.5 | 30 | 6  | A71921    | A71921 Sequence 2   |
| 553   | 10.6 | 50.5 | 17 | 6 | AX227423   | AX227423 Sequence    | c 626 | 10.6 | 50.5 | 30 | 6  | AR083507  | AR083507 Sequence   |
| 554   | 10.6 | 50.5 | 18 | 6 | 131444     | 131444 Sequence 35   | c 627 | 10.6 | 50.5 | 30 | 6  | AR083530  | AR083530 Sequence   |
| 555   | 10.6 | 50.5 | 18 | 6 | 172438     | 172438 Sequence 32   | c 628 | 10.6 | 50.5 | 30 | 6  | AR095041  | AR095041 Sequence   |
| 556   | 10.6 | 50.5 | 19 | 4 | 1062158102 | 178622 Paris famil   | c 629 | 10.6 | 50.5 | 30 | 6  | AR106499  | AR106499 Sequence   |
| c 557 | 10.6 | 50.5 | 19 | 6 | AR066656   | AR066656 Sequence    | 630   | 10.6 | 50.5 | 30 | 6  | AR118762  | AR118762 Sequence   |
| c 558 | 10.6 | 50.5 | 19 | 6 | AR145163   | AR145163 Sequence    | c 631 | 10.6 | 50.5 | 30 | 6  | AX117483  | AX117483 Sequence   |
| c 559 | 10.6 | 50.5 | 19 | 6 | AX282896   | AX282896 Sequence    | 632   | 10.6 | 50.5 | 30 | 6  | AX202246  | AX202246 Sequence   |
| 560   | 10.6 | 50.5 | 20 | 6 | A23782     | A23782 colligand 100 | c 633 | 10.6 | 50.5 | 30 | 6  | 106354    | 106354 Sequence 14  |
| c 561 | 10.6 | 50.5 | 20 | 6 | AR199425   | AR199425 Sequence    | c 634 | 10.6 | 50.5 | 30 | 6  | 168947    | 168947 Sequence 20  |
| 562   | 10.6 | 50.5 | 20 | 6 | AX259693   | AX259693 Sequence    | c 635 | 10.6 | 50.5 | 30 | 10 | MMBNP114H | X66554 M.musculus   |
| c 563 | 10.6 | 50.5 | 20 | 6 | AX294859   | AX294859 Sequence    | c 636 | 10.6 | 50.5 | 30 | 10 | MMF10154  | X67479 M.musculus   |
| c 564 | 10.6 | 50.5 | 20 | 6 | AX297128   | AX297128 Sequence    | c 637 | 10.6 | 50.5 | 32 | 6  | AR094081  | AR094081 Sequence   |
| c 565 | 10.6 | 50.5 | 20 | 6 | AX297145   | AX297145 Sequence    | c 638 | 10.6 | 50.5 | 32 | 6  | AR142179  | AR142179 Sequence   |
| c 566 | 10.6 | 50.5 | 20 | 6 | AX297149   | AX297149 Sequence    | c 639 | 10.6 | 50.5 | 32 | 6  | AR144465  | AR144465 Sequence   |
| c 567 | 10.6 | 50.5 | 20 | 6 | AX297157   | AX297157 Sequence    | 640   | 10.6 | 50.5 | 32 | 6  | AX085549  | AX085549 Sequence   |
| 568   | 10.6 | 50.5 | 20 | 6 | 147753     | 147753 Sequence 25   | c 641 | 10.6 | 50.5 | 32 | 6  | H0003361  | H0003361 Mammalian  |
| 569   | 10.6 | 50.5 | 20 | 6 | 172450     | 172450 Sequence 34   | 642   | 10.6 | 50.5 | 32 | 6  | BE005748  | BE005748 Thetaput   |
| c 570 | 10.6 | 50.5 | 21 | 6 | AR083508   | AR083508 Sequence    | 643   | 10.6 | 50.5 | 33 | 6  | 120413    | 120413 Sequence 6   |
| c 571 | 10.6 | 50.5 | 21 | 6 | AX095228   | AX095228 Sequence    | 644   | 10.6 | 50.5 | 33 | 6  | AX089556  | AX089556 Sequence   |
| 572   | 10.6 | 50.5 | 21 | 6 | AX096849   | AX096849 Sequence    | 645   | 10.6 | 50.5 | 34 | 6  | AR024209  | AR024209 Sequence   |
| 573   | 10.6 | 50.5 | 21 | 6 | AX100880   | AX100880 Sequence    | 646   | 10.6 | 50.5 | 34 | 6  | AR176161  | AR176161 Sequence   |
| 574   | 10.6 | 50.5 | 21 | 6 | AX404325   | AX404325 Sequence    | 647   | 10.6 | 50.5 | 34 | 6  | AR205025  | AR205025 Sequence   |
| c 575 | 10.6 | 50.5 | 21 | 6 | AX404326   | AX404326 Sequence    | 648   | 10.6 | 50.5 | 34 | 6  | AX082536  | AX082536 Sequence   |
| c 576 | 10.6 | 50.5 | 23 | 6 | AX020547   | AX020547 Sequence    | c 649 | 10.6 | 50.5 | 34 | 6  | AX183977  | AX183977 Sequence   |

|     |      |      |    |   |                     |                       |       |      |      |    |   |          |                   |
|-----|------|------|----|---|---------------------|-----------------------|-------|------|------|----|---|----------|-------------------|
| 650 | 10.6 | 50.5 | 44 | 6 | AX470651            | AX470651 Sequence     | c 724 | 10.4 | 49.5 | 17 | 6 | AX324166 | AX324166 Sequence |
| 651 | 10.6 | 50.5 | 34 | 9 | AR055766 Homo sapi  | AR055766 Homo sapi    | c 724 | 10.4 | 49.5 | 17 | 6 | AX324177 | AX324177 Sequence |
| 652 | 10.6 | 50.5 | 35 | 6 | A25218 KpnI/LINE sp | A25218 KpnI/LINE sp   | c 725 | 10.4 | 49.5 | 17 | 6 | AX324178 | AX324178 Sequence |
| 653 | 10.6 | 50.5 | 35 | 6 | AX346821            | AX346821 Sequence     | 726   | 10.4 | 49.5 | 19 | 6 | AR044745 | AR044745 Sequence |
| 654 | 10.6 | 50.5 | 35 | 6 | E09146              | E09146 Syntactel ic p | 727   | 10.4 | 49.5 | 19 | 6 | AR052382 | AR052382 Sequence |
| 655 | 10.6 | 50.5 | 36 | 6 | AR031559            | AR031559 Sequence     | 728   | 10.4 | 49.5 | 19 | 6 | AR055180 | AR055180 Sequence |
| 656 | 10.6 | 50.5 | 36 | 6 | AX559355            | AX559355 Sequence     | 729   | 10.4 | 49.5 | 19 | 6 | AR158051 | AR158051 Sequence |
| 657 | 10.6 | 50.5 | 37 | 6 | AX092945            | AX092945 Sequence     | 730   | 10.4 | 49.5 | 19 | 6 | AR149021 | AR149021 Sequence |
| 658 | 10.6 | 50.5 | 37 | 6 | AX135089            | AX135089 Sequence     | 731   | 10.4 | 49.5 | 19 | 6 | 192531   | Sequence 57       |
| 659 | 10.6 | 50.5 | 37 | 6 | AX136046            | AX136046 Sequence     | 732   | 10.4 | 49.5 | 20 | 6 | AR001084 | AR001084 Sequence |
| 660 | 10.6 | 50.5 | 37 | 6 | AX167315            | AX167315 Sequence     | 733   | 10.4 | 49.5 | 20 | 6 | AR027450 | AR027450 Sequence |
| 661 | 10.6 | 50.5 | 37 | 6 | B0006881            | B0006881 oligonuc1    | c 734 | 10.4 | 49.5 | 20 | 6 | AR044744 | AR044744 Sequence |
| 662 | 10.6 | 50.5 | 37 | 6 | B0009282            | B0009282 Mut dat 1a   | c 735 | 10.4 | 49.5 | 20 | 6 | AR052481 | AR052481 Sequence |
| 663 | 10.6 | 50.5 | 37 | 6 | L29947              | Sequence 11           | c 736 | 10.4 | 49.5 | 20 | 6 | AR055179 | AR055179 Sequence |
| 664 | 10.6 | 50.5 | 38 | 6 | E07616              | E07616 PCR primer     | 737   | 10.4 | 49.5 | 20 | 6 | AR058259 | AR058259 Sequence |
| 665 | 10.6 | 50.5 | 38 | 6 | E08666              | E08666 NTV primer     | c 738 | 10.4 | 49.5 | 20 | 6 | AR067271 | AR067271 Sequence |
| 666 | 10.6 | 50.5 | 38 | 6 | 114139              | Sequence 14           | 739   | 10.4 | 49.5 | 20 | 6 | AR086187 | AR086187 Sequence |
| 667 | 10.6 | 50.5 | 39 | 6 | A69266              | A69266 Sequence 5     | 740   | 10.4 | 49.5 | 20 | 6 | AR086188 | AR086188 Sequence |
| 668 | 10.6 | 50.5 | 39 | 6 | A71943              | A71943 Sequence 5     | c 741 | 10.4 | 49.5 | 20 | 6 | AR086208 | AR086208 Sequence |
| 669 | 10.6 | 50.5 | 39 | 6 | AR147131            | AR147131 Sequence     | 742   | 10.4 | 49.5 | 20 | 6 | AR116442 | AR116442 Sequence |
| 670 | 10.6 | 50.5 | 39 | 6 | AX429366            | AX429366 Sequence     | c 743 | 10.4 | 49.5 | 20 | 6 | AR124470 | AR124470 Sequence |
| 671 | 10.6 | 50.5 | 39 | 6 | AX382256            | AX382256 Sequence     | c 744 | 10.4 | 49.5 | 20 | 6 | AR158050 | AR158050 Sequence |
| 672 | 10.6 | 50.5 | 40 | 6 | AR152454            | AR152454 Sequence     | c 745 | 10.4 | 49.5 | 20 | 6 | AR163913 | AR163913 Sequence |
| 673 | 10.6 | 50.5 | 42 | 6 | AR094126            | AR094126 Sequence     | 746   | 10.4 | 49.5 | 20 | 6 | AR176753 | AR176753 Sequence |
| 674 | 10.6 | 50.5 | 42 | 6 | AR118075            | AR118075 Sequence     | 747   | 10.4 | 49.5 | 20 | 6 | AR176754 | AR176754 Sequence |
| 675 | 10.6 | 50.5 | 42 | 9 | HS422476            | HS422476 Homo sapi    | c 748 | 10.4 | 49.5 | 20 | 6 | AR176774 | AR176774 Sequence |
| 676 | 10.6 | 50.5 | 44 | 6 | AR079005            | AR079005 Sequence     | c 749 | 10.4 | 49.5 | 20 | 6 | AX195348 | AX195348 Sequence |
| 677 | 10.6 | 50.5 | 44 | 6 | AX008787            | AX008787 Sequence     | c 750 | 10.4 | 49.5 | 20 | 6 | AX224874 | AX224874 Sequence |
| 678 | 10.6 | 50.5 | 44 | 6 | AX157237            | AX157237 Sequence     | c 751 | 10.4 | 49.5 | 20 | 6 | AX224876 | AX224876 Sequence |
| 679 | 10.6 | 50.5 | 44 | 6 | AX157238            | AX157238 Sequence     | 752   | 10.4 | 49.5 | 20 | 6 | AX224884 | AX224884 Sequence |
| 680 | 10.6 | 50.5 | 45 | 6 | A49946              | Sequence 6            | 753   | 10.4 | 49.5 | 20 | 6 | AX295267 | AX295267 Sequence |

|       |      |      |    |    |          |                    |
|-------|------|------|----|----|----------|--------------------|
| c 796 | 10.4 | 49.5 | 24 | 6  | E12955   | E12955 Probe for d |
| 797   | 10.4 | 49.5 | 24 | 6  | 124356   | Sequence 5         |
| 798   | 10.4 | 49.5 | 24 | 6  | 150090   | Sequence 34        |
| 799   | 10.4 | 49.5 | 24 | 6  | 150794   | Sequence 25        |
| c 800 | 10.4 | 49.5 | 25 | 6  | A47372   | Sequence 4         |
| 801   | 10.4 | 49.5 | 25 | 6  | AR105879 | Sequence           |
| c 802 | 10.4 | 49.5 | 26 | 6  | AR091073 | Sequence           |
| 803   | 10.4 | 49.5 | 26 | 6  | AR198108 | Sequence           |
| 804   | 10.4 | 49.5 | 26 | 6  | AR210804 | Sequence           |
| 805   | 10.4 | 49.5 | 27 | 6  | A48370   | Sequence 15        |
| c 806 | 10.4 | 49.5 | 27 | 6  | AR075137 | Sequence           |
| c 807 | 10.4 | 49.5 | 27 | 6  | AR143760 | Sequence           |
| c 808 | 10.4 | 49.5 | 27 | 6  | AX023902 | Sequence           |
| 809   | 10.4 | 49.5 | 27 | 6  | AX443537 | Sequence           |
| 810   | 10.4 | 49.5 | 27 | 6  | BD011180 | Human tel          |
| 811   | 10.4 | 49.5 | 27 | 6  | E36929   | Sequence           |
| 812   | 10.4 | 49.5 | 27 | 6  | E19777   | Sequence 11        |
| 813   | 10.4 | 49.5 | 28 | 6  | A44168   | Sequence           |
| 814   | 10.4 | 49.5 | 28 | 6  | AR161753 | Sequence           |
| 815   | 10.4 | 49.5 | 28 | 6  | AX006057 | Sequence           |
| 816   | 10.4 | 49.5 | 28 | 6  | AX006075 | Sequence           |
| 817   | 10.4 | 49.5 | 29 | 6  | AR123375 | Sequence           |
| 818   | 10.4 | 49.5 | 29 | 6  | AX300688 | Sequence           |
| 819   | 10.4 | 49.5 | 29 | 6  | E10680   | Primer 9/1         |
| 820   | 10.4 | 49.5 | 30 | 6  | A01822   | Nucleotide         |
| c 821 | 10.4 | 49.5 | 30 | 6  | A01823   | Nucleotide         |
| 822   | 10.4 | 49.5 | 30 | 6  | A14390   | Sequence           |
| 823   | 10.4 | 49.5 | 30 | 6  | AR040650 | Sequence           |
| 824   | 10.4 | 49.5 | 30 | 6  | AR107033 | Sequence           |
| 825   | 10.4 | 49.5 | 30 | 6  | AR108871 | Sequence           |
| 826   | 10.4 | 49.5 | 30 | 6  | AR110606 | Sequence           |
| 827   | 10.4 | 49.5 | 30 | 6  | AR125679 | Sequence           |
| 828   | 10.4 | 49.5 | 30 | 6  | AR171756 | Sequence           |
| c 829 | 10.4 | 49.5 | 30 | 6  | AX024002 | Sequence           |
| c 830 | 10.4 | 49.5 | 30 | 6  | AX108105 | Sequence           |
| c 831 | 10.4 | 49.5 | 30 | 6  | AX202309 | Sequence           |
| 832   | 10.4 | 49.5 | 30 | 6  | AX435545 | Sequence           |
| 833   | 10.4 | 49.5 | 30 | 6  | BD012543 | Method fo          |
| 834   | 10.4 | 49.5 | 30 | 6  | E26512   | Sugar chain        |
| 835   | 10.4 | 49.5 | 30 | 6  | 147091   | Sequence 21        |
| 836   | 10.4 | 49.5 | 30 | 6  | 147748   | Sequence 20        |
| 837   | 10.4 | 49.5 | 30 | 23 | BD005177 | Method fo          |
| 838   | 10.4 | 49.5 | 31 | 6  | AR029109 | Sequence           |
| 839   | 10.4 | 49.5 | 31 | 6  | AR035244 | Sequence           |
| 840   | 10.4 | 49.5 | 31 | 6  | AR048726 | Sequence           |
| 841   | 10.4 | 49.5 | 31 | 6  | AR065921 | Sequence           |
| 842   | 10.4 | 49.5 | 31 | 6  | AR107114 | Sequence           |
| 843   | 10.4 | 49.5 | 31 | 6  | AR112705 | Sequence           |
| c 844 | 10.4 | 49.5 | 31 | 6  | AR174280 | Sequence           |
| c 845 | 10.4 | 49.5 | 31 | 6  | AX151288 | Sequence           |
| 846   | 10.4 | 49.5 | 31 | 6  | AX248226 | Sequence           |
| c 847 | 10.4 | 49.5 | 31 | 6  | AX248646 | Sequence           |
| 848   | 10.4 | 49.5 | 31 | 6  | 173526   | Sequence 1         |
| 849   | 10.4 | 49.5 | 32 | 6  | A37857   | Sequence 27        |
| 850   | 10.4 | 49.5 | 32 | 6  | AR069895 | Sequence           |
| 851   | 10.4 | 49.5 | 32 | 6  | AR095922 | Sequence           |
| 852   | 10.4 | 49.5 | 32 | 6  | AR124176 | Sequence           |
| c 853 | 10.4 | 49.5 | 32 | 6  | AR200508 | Sequence           |
| 854   | 10.4 | 49.5 | 32 | 6  | AR200547 | Sequence           |
| c 855 | 10.4 | 49.5 | 32 | 6  | AX011510 | Sequence           |
| c 856 | 10.4 | 49.5 | 32 | 6  | AX112218 | Sequence           |
| c 857 | 10.4 | 49.5 | 32 | 6  | AX149738 | Sequence           |
| c 858 | 10.4 | 49.5 | 33 | 6  | A00283   | Sequence 15        |
| c 859 | 10.4 | 49.5 | 33 | 6  | AR041965 | Sequence           |
| 860   | 10.4 | 49.5 | 33 | 6  | AR148311 | Sequence           |
| c 861 | 10.4 | 49.5 | 33 | 6  | AX304924 | Sequence           |
| 862   | 10.4 | 49.5 | 33 | 6  | AX305011 | Sequence           |
| 863   | 10.4 | 49.5 | 33 | 6  | AX306540 | Sequence           |
| 864   | 10.4 | 49.5 | 34 | 6  | A93588   | Sequence 18        |
| 865   | 10.4 | 49.5 | 34 | 6  | A93643   | Sequence 2         |
| 866   | 10.4 | 49.5 | 34 | 6  | AR176284 | Sequence           |
| c 867 | 10.4 | 49.5 | 34 | 6  | AX003737 | Sequence           |
| c 868 | 10.4 | 49.5 | 34 | 6  | AX023341 | Sequence           |
| 869   | 10.4 | 49.5 | 34 | 6  | AX168006 | Sequence           |
| 870   | 10.4 | 49.5 | 35 | 6  | AX047306 | Sequence           |
| 871   | 10.4 | 49.5 | 36 | 6  | A78953   | Sequence 7         |
| c 872 | 10.4 | 49.5 | 36 | 6  | AR038945 | Sequence           |
| c 873 | 10.4 | 49.5 | 36 | 6  | AR091300 | Sequence           |
| c 874 | 10.4 | 49.5 | 36 | 6  | AR123398 | Sequence           |
| c 875 | 10.4 | 49.5 | 36 | 6  | AR137681 | Sequence           |
| 876   | 10.4 | 49.5 | 36 | 6  | AR147755 | Sequence           |
| 877   | 10.4 | 49.5 | 36 | 6  | AR159777 | Sequence           |
| 878   | 10.4 | 49.5 | 36 | 6  | AR160469 | Sequence           |
| c 879 | 10.4 | 49.5 | 36 | 6  | AR199690 | Sequence           |
| 880   | 10.4 | 49.5 | 36 | 6  | AR202425 | Sequence           |
| c 881 | 10.4 | 49.5 | 36 | 6  | AX063395 | Sequence           |
| c 882 | 10.4 | 49.5 | 36 | 6  | E31261   | Human Mps2         |
| c 883 | 10.4 | 49.5 | 37 | 6  | AR166175 | Sequence           |
| 884   | 10.4 | 49.5 | 38 | 6  | AR126767 | Sequence           |
| 885   | 10.4 | 49.5 | 38 | 6  | AX023058 | Sequence           |
| 886   | 10.4 | 49.5 | 38 | 6  | AX031103 | Sequence           |
| 887   | 10.4 | 49.5 | 38 | 6  | AX127425 | Sequence           |
| 888   | 10.4 | 49.5 | 39 | 6  | A48347   | Sequence 5         |
| c 889 | 10.4 | 49.5 | 39 | 6  | AR026913 | Sequence           |
| c 890 | 10.4 | 49.5 | 39 | 6  | AR049339 | Sequence           |
| c 891 | 10.4 | 49.5 | 39 | 6  | AR065597 | Sequence           |
| 892   | 10.4 | 49.5 | 39 | 6  | AR141375 | Sequence           |
| 893   | 10.4 | 49.5 | 39 | 6  | AX058432 | Sequence           |
| 894   | 10.4 | 49.5 | 39 | 6  | AX062302 | Sequence           |
| 895   | 10.4 | 49.5 | 39 | 6  | AX179597 | Sequence           |
| 896   | 10.4 | 49.5 | 39 | 6  | AX468769 | Sequence           |
| 897   | 10.4 | 49.5 | 39 | 6  | E40051   | Human Nucleo       |
| 898   | 10.4 | 49.5 | 39 | 6  | E40859   | Human Nucleo       |
| 899   | 10.4 | 49.5 | 39 | 6  | E43405   | Human Nucleo       |
| 900   | 10.4 | 49.5 | 40 | 6  | A06484   | Nucleotide         |
| 901   | 10.4 | 49.5 | 40 | 6  | A83612   | Sequence 41        |
| 902   | 10.4 | 49.5 | 40 | 6  | AR202261 | Sequence           |
| 903   | 10.4 | 49.5 | 40 | 6  | AX002957 | Sequence           |
| c 904 | 10.4 | 49.5 | 40 | 11 | G73634   | R225R et al        |
| c 905 | 10.4 | 49.5 | 41 | 6  | AX327055 | Sequence           |
| c 906 | 10.4 | 49.5 | 42 | 6  | A39354   | Sequence 20        |
| c 907 | 10.4 | 49.5 | 43 | 6  | AR030695 | Sequence           |
| 908   | 10.4 | 49.5 | 43 | 6  | AX480619 | Sequence           |
| 909   | 10.4 | 49.5 | 44 | 6  | AR037048 | Sequence           |
| 910   | 10.4 | 49.5 | 44 | 6  | AR059387 | Sequence           |
| c 911 | 10.4 | 49.5 | 44 | 6  | AR052949 | Sequence           |
| c 912 | 10.4 | 49.5 | 45 | 6  | AR080032 | Sequence           |
| c 913 | 10.4 | 49.5 | 45 | 6  | AR085958 | Sequence           |
| 914   | 10.4 | 49.5 | 45 | 6  | AR103956 | Sequence           |
| c 915 | 10.4 | 49.5 | 45 | 6  | AR121724 | Sequence           |
| 916   | 10.4 | 49.5 | 45 | 6  | AR160125 | Sequence           |
| 917   | 10.4 | 49.5 | 45 | 6  | AR202199 | Sequence           |
| 918   | 10.4 | 49.5 | 45 | 6  | AR202273 | Sequence           |
| 919   | 10.4 | 49.5 | 45 | 6  | AR207528 | Sequence           |
| 920   | 10.4 | 49.5 | 45 | 6  | AX460804 | Sequence           |
| c 921 | 10.4 | 49.5 | 45 | 6  | BU000855 | Compounds          |
| c 922 | 10.4 | 49.5 | 45 | 6  | 133136   | Sequence 2         |
| 923   | 10.4 | 49.5 | 45 | 6  | 152054   | Sequence 6         |
| 924   | 10.4 | 49.5 | 45 | 6  | AR075452 | Sequence           |
| 925   | 10.4 | 49.5 | 46 | 6  | AR153903 | Sequence           |
| 926   | 10.4 | 49.5 | 46 | 6  | AR178520 | Sequence           |
| c 927 | 10.4 | 49.5 | 46 | 6  | AX403139 | Sequence           |
| 928   | 10.4 | 49.5 | 46 | 6  | 117537   | Sequence 5         |
| c 929 | 10.4 | 49.5 | 47 | 6  | AR072106 | Sequence           |
| 930   | 10.4 | 49.5 | 47 | 6  | AR072107 | Sequence           |
| c 931 | 10.4 | 49.5 | 48 | 6  | A06485   | Nucleotide         |
| 932   | 10.4 | 49.5 | 48 | 6  | A06486   | reverse com        |
| c 933 | 10.4 | 49.5 | 48 | 6  | AR202260 | Sequence           |
| c 934 | 10.4 | 49.5 | 48 | 6  | AX229302 | Sequence           |
| c 935 | 10.4 | 49.5 | 48 | 9  | HSTRKX35 | Sequence           |
| c 936 | 10.4 | 49.5 | 48 | 9  | Z69499   | H. sapiens m       |
| 937   | 10.4 | 49.5 | 48 | 11 | G34982   | DIFFX human        |
| 938   | 10.4 | 49.5 | 49 | 6  | AR035248 | Sequence           |
| 939   | 10.4 | 49.5 | 49 | 6  | AR107118 | Sequence           |
| 940   | 10.4 | 49.5 | 49 | 6  | AR112709 | Sequence           |
| 941   | 10.4 | 49.5 | 49 | 6  | AR179031 | Sequence           |







|                       |   |
|-----------------------|---|
| RESULT 9              | RESULT 10   |
| LOCUS                 | AX045541  |
| DEFINITION            | Sequence 428 from Patent W0007454.                                      |
| ACCESSION             | AX045541  |
| VERSION               | AX045541.1 GI:21457014  |
| KEYWORDS              | synthetic construct.  |
| SOURCE                | synthetic construct   |
| ORGANISM              | artificial sequences.   |
| REFERENCE             | 1   |
| AUTHORS               | Asikemazi, A.L., Baker, K.P., Botstein, D., Desnovers, L., Eaton, D.,   |
|                       | Estrada, N., Gohet, H., Gertlson, M., Giddard, A., Gadowski, P.,        |
|                       | Grimaldi, C.J., Gurney, A.L., Klavin, L., Napier, M.A., Pan, J.,        |
|                       | Paul, N.F., Perry, M., Stewart, L.A., Tomas, D., Watanabe, C.K.,        |
|                       | Williams, P., Wood, W.L. and Zhou, Z.                                   |
|                       | Secreted and transmembrane polypeptides and nucleic acids encoding      |
|                       | the same.   |
| TITLE                 | Patent: W0 007 454 A 428 07-08-2000;                                    |
| JOURNAL               | Genotech Inc. (US)  |
| FEATURES              | Location/Qualifiers   |
| source                | 1..21   |
|                       | /organism "synthetic construct"   |
|                       | /db_xref "taxon:42640"  |
|                       | /note "Synthetic oligonucleotide probe"                                 |
| BASE COUNT            | 5 a 11 c 5 q 2 t  |
| ORIGIN                |   |
| Query Match           | 63.8%; Score 13.4; DB 6; Length 21;                                     |
| Best Local Similarity | 93.4%; Pred. No. 2.7e+05;   |
| Matches               | 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;                     |
| QY                    | 2 ACCTATGGAGGCGG 16   |
| DB                    | 1 111111111111  |
|                       | 3 ACAAATGGAGGCGG 17   |
| RESULT 11             |   |
| LOCUS                 | AX055620  |
| DEFINITION            | Sequence 45 from Patent W0052152.                                       |
| ACCESSION             | AX055620  |
| VERSION               | AX055620.1 GI:11191215  |
| KEYWORDS              | Bacillus subtilis.  |
| SOURCE                | Bacillus subtilis.  |
| ORGANISM              | Bacillus subtilis   |
| REFERENCE             | 1   |
| AUTHORS               | Bacteroid; Fumicoccus; Bacillales; Bacillaceae; Bacillus.               |
| TITLE                 | Stachelhaus, L., Konz, D., Mout, H., and Marahel, M.A.                  |
|                       | Non ribosomal peptide synthetases, method for producing same and        |
|                       | the use thereof   |
| JOURNAL               | Patent: W0 005 2152 A 45 08 SEP 2000;                                   |
|                       | STACHELHAUS, LORSTEN (DE) ; KONZ, DIK (DE) ; MOUT, HENNING (DE) ;       |
|                       | MARAHIEL, MICHAEL A (DE)  |
| FEATURES              | Location/Qualifiers   |
| source                | 1..23   |
|                       | /organism "Bacillus subtilis"   |
|                       | /db_xref "taxon:1426"   |
| BASE COUNT            | 7 a 4 c 8 q 4 t   |
| ORIGIN                |   |
| Query Match           | 62.9%; Score 13.2; DB 6; Length 23;                                     |
| Best Local Similarity | 86.4%; Pred. No. 3.4e+05;   |
| Matches               | 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;                     |
| QY                    | 4 CCAAGCGAGCGCGGTC 21   |
| DB                    | 1 111111111111  |
|                       | 2 ACAAATGGAGGCGGCGG 6   |
| RESULT 12             |   |
| RESULT 9              |   |
| LOCUS                 | AB174752  |
| DEFINITION            | Sequence 5 from patent US 6407046.                                      |
| ACCESSION             | AB174752  |
| VERSION               | AB174752.1 GI:17915072  |
| KEYWORDS              | Unknown.  |
| SOURCE                | Unknown.  |
| ORGANISM              | unclassified.   |
| REFERENCE             | 1 (bases 1 to 45)   |
| AUTHORS               | Milner, J. and Veldhoen, N.   |
| TITLE                 | Tumour suppressor gene  |
| JOURNAL               | Patent: US 6407046-A 5 24-oct-2001;                                     |
| FEATURES              | Location/Qualifiers   |
| source                | 1..53   |
|                       | /organism "unknown"   |
| BASE COUNT            | 4 a 7 c 12 q 3 t 7 others   |
| ORIGIN                |   |
| Query Match           | 65.7%; Score 13.8; DB 6; Length 33;                                     |
| Best Local Similarity | 80.0%; Pred. No. 1.6e+05;   |
| Matches               | 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;                     |
| QY                    | 4 CCAAGCGAGCGGCG 18   |
| DB                    | 1 111111111111  |
|                       | 22 CCAATGAGCGGCGG 8   |
| RESULT 9              |   |
| LOCUS                 | BSHELX1   |
| DEFINITION            | H.sapiens Hlx-1 gene, acceptor first intron.                            |
| ACCESSION             | X95914  |
| VERSION               | X95914.1 GI:1770441   |
| KEYWORDS              | Hlx-1 gene; LIM 1 protein.  |
| SOURCE                | Homo sapiens.   |
| ORGANISM              | Homo sapiens  |
| REFERENCE             | 1   |
| AUTHORS               | Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;                 |
|                       | Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.              |
|                       | 1 (bases 1 to 50)   |
|                       | Bozzelli, F., Bertuzzi, S., Striano, G., Giannetto, C., Vezzoni, P. and |
|                       | Villa, A.   |
| TITLE                 | The exon intron structure of human HXL1 gene                            |
| JOURNAL               | Biochem. Biophys. Commun. 229 (2), 494-497 (1996)                       |
| MELLINE               | 97127430  |
| FORMED                | 8954926   |
| REFERENCE             | 2 (bases 1 to 50)   |
| AUTHORS               | Bozzelli, F.  |
| TITLE                 | Direct Submission   |
| JOURNAL               | Submitted (22 MAR 1996) F. Bozzelli, IIBA - CNR, via Ampere 56, 20131   |
|                       | Milano, ITALY   |
| FEATURES              | Location/Qualifiers   |
| source                | 1..50   |
|                       | /organism "Homo sapiens"  |
|                       | /db_xref "taxon:9606"   |
|                       | /chromosome "11"  |
|                       | /map "p12"  |
|                       | 1..50   |
|                       | /gene "HLX 1"   |
| gene                  | 1..50   |
| misc feature          | /gene "HLX 1"   |
|                       | /product "LIM 1 protein"  |
|                       | /note "acceptor first intron"   |
| BASE COUNT            | 5 a 45 c 7 q 4 t  |
| ORIGIN                |   |
| Query Match           | 64.8%; Score 13.6; DB 9; Length 50;                                     |
| Best Local Similarity | 80.0%; Pred. No. 1.9e+05;   |
| Matches               | 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;                     |
| QY                    | 1 GAAATGAGCGGCGGTC 20   |
| DB                    | 1 11111111111111  |
|                       | 9 GAAATGAGCGGCGGCGG 28  |



```

ORGANISM   unidentified
            unclassified
FEATURES
  source    1..31
            /organism "unidentified"
            /db_xref "taxon:32644"
BASE COUNT 5 a 11 c 10 g 5 t
ORIGIN

Query Match 62.9%; Score 13.2; Db 6; Length 41;
Best Local Similarity 83.4%; Pred. No. 3; 0.05;
Matches 1%; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GACCAATGGAGCGCGG 18
1 | | | | | | | | | |
Db 6 GACCAATGGAGCGCGG 24

RESULT 17
A00479
LOCUS     A00479          41 bp    mRNA          Linear          PAT 08 MAY 1996
DEFINITION Nucleotide sequence 12 from patent number W09005185.
ACCESSION A00479
KEYWORDS
SOURCE    unidentified
ORGANISM   unidentified
            unclassified
FEATURES
  source    1..31
            /organism "unidentified"
            /db_xref "taxon:32644"
BASE COUNT 5 a 11 c 10 g 5 t
ORIGIN

Query Match 62.9%; Score 13.2; Db 6; Length 41;
Best Local Similarity 83.4%; Pred. No. 3; 0.05;
Matches 1%; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GACCAATGGAGCGCGG 18
1 | | | | | | | | | |
Db 6 GACCAATGGAGCGCGG 24

RESULT 18
A00476/c
LOCUS     A00476/c       45 bp    DNA          Linear          PAT 08 MAY 1996
DEFINITION Nucleotide sequence 9 from patent number W09005185.
ACCESSION A00476
VERSION    A00476.1    GI:1566708
KEYWORDS
SOURCE    unidentified
ORGANISM   unidentified
            unclassified
FEATURES
  source    1..45
            /organism "unidentified"
            /db_xref "taxon:32644"
BASE COUNT 6 a 11 c 12 g 6 t
ORIGIN

Query Match 62.9%; Score 13.2; Db 6; Length 45;
Best Local Similarity 83.4%; Pred. No. 3; 0.05;
Matches 1%; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GACCAATGGAGCGCGG 18
1 | | | | | | | | | |
Db 6 GACCAATGGAGCGCGG 24

RESULT 19
A00480/c
LOCUS     A00480        45 bp    mRNA          Linear          PAT 08 MAY 1996

```

```

DEFINITION Nucleotide sequence 13 from patent number W09005185.
ACCESSION A00480
VERSION    A00480.1    GI:1566711
KEYWORDS
SOURCE    unidentified
            unclassified
FEATURES
  source    1..45
            /organism "unidentified"
            /db_xref "taxon:32644"
BASE COUNT 6 a 11 c 12 g 6 t
ORIGIN

Query Match 62.9%; Score 13.2; Db 6; Length 45;
Best Local Similarity 83.4%; Pred. No. 3; 0.05;
Matches 1%; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GACCAATGGAGCGCGG 18
1 | | | | | | | | | |
Db 40 GACCAATGGAGCGCGG 14

RESULT 20
A0088748
LOCUS     A0088748      48 bp    DNA          Linear          PAT 17 MAR 2001
DEFINITION Sequence 64 from patent W0114416.
ACCESSION A0088748
VERSION    A0088748.1  GI:13397534
KEYWORDS
SOURCE    synthetic construct
            synthetic construct
            artificial sequences
            (bases 1 to 48)
REFERENCE 1 (bases 1 to 48)
AUTHORS   Neupert M, P.; Moellmanns W, L.; Jansen K, H.; Schmitt Z, L, D.; Chen, L.
            and Ward, X, M.
TITLE      Synthetic human papillomavirus genes
            Patent: W0114416, A 64 01 MAR 2001;
            Merck & Co., Inc. (US)
FEATURES
  source    1..48
            /organism "synthetic construct"
            /db_xref "taxon:32644"
            /note "Synthetic optimized HPV16 E1 fragment"
BASE COUNT 7 a 18 c 8 g 5 t
ORIGIN

Query Match 62.9%; Score 13.2; Db 6; Length 48;
Best Local Similarity 83.4%; Pred. No. 2; 0.05;
Matches 1%; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4 CCAAGGAGCGCGCGG 21
1 | | | | | | | | | |
Db 17 CCAAGGAGCGCGCGG 34

RESULT 21
A0162155/c
LOCUS     A0162155/c   42 bp    DNA          Linear          PAT 17 OCT 2001
DEFINITION Sequence 4 from patent US 6,258,666.
ACCESSION A0162155
VERSION    A0162155.1  GI:16229240
KEYWORDS
SOURCE    unknown
            unknown
            unclassified
            (bases 1 to 42)
REFERENCE 1 (bases 1 to 42)
AUTHORS   Bart, P., L.; Sant, J., D., V.; Ashley, J., W.; and Zietmann, R.
            Production of polypeptides in bacteriophage and yeast
            Patent: US 6,258,666, A 4 10 JUL 2001;
            Location/Qualifiers
FEATURES
  source    1..42
            /organism "unknown"

```

BASE COUNT 13 a 8 c 10 g 11 t  
ORIGIN

Query Match  
Best Local Similarity 62.9% Score 13.2; DB 6; Length 42;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4 CATTAGGAGGCGGCTGG 21  
11111 111 111 111  
DB 40 CATTAGGAGGCGGCTGG 24

RESULT 22

LOCUS AR097431 25 bp DNA Linear PAT 14-FEB-2001

DEFINITION Sequence 15 from patent US 6071729.

ACCESSION AR097431

VERSION AR097431.1 GI:12806161

KEYWORDS

SOURCE

ORGANISM

Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 25)

AUTHORS Partis, L.W. and Shi, N. Q.

TITLE Disruption of the cytochrome c gene in xylofermenting yeast

JOURNAL Patent: US 6071729-A 15 06-2001-2001

FEATURES

Location/Qualifiers

1..25

/organism "unknown"

BASE COUNT 4 a 9 c 7 g 5 t

ORIGIN

Query Match

Best Local Similarity 61.9% Score 13; DB 6; Length 25;

Matches 16; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CATTGATGGAGCGCCGCTGG 21

11111 111 111 111

DB 5 CATTGATGGAGCGCCGCTGG 25

RESULT 24

LOCUS AR058910 28 bp DNA Linear PAT 29-SEP-1999

DEFINITION Sequence 16 from patent US 5837846.

ACCESSION AR058910

VERSION AR058910.1 GI:5984487

KEYWORDS

SOURCE

ORGANISM

Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 28)

AUTHORS Friderici, K., Jones, M.Z., Chen, H. and Cavanagh, K.F.

TITLE Bovine beta-mannosidase nucleic acid sequence

JOURNAL Patent: US 5837846-A 16 12-NOV-1998

FEATURES

Location/Qualifiers

1..28

/organism "unknown"

BASE COUNT 7 a 5 c 6 g 4 t 6 others

ORIGIN

Query Match

Best Local Similarity 61.9% Score 13; DB 6; Length 28;

Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 2 CATTAGGAGGCGGCTGG 21

111 111 111 111 111

DB 21 ATTCTGGGAATGCGGAG 2

RESULT 24

LOCUS 146271 28 bp DNA Linear PAT 13-MAY-1997

DEFINITION Sequence 16 from patent US 5605797.

ACCESSION 146271

VERSION 146271.1 GI:2086784

KEYWORDS

SOURCE

ORGANISM

Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 28)

AUTHORS Friderici, K., Jones, M.Z., Chen, H. and Cavanagh, K.F.

TITLE Bovine beta-mannosidase gene and methods of use

JOURNAL Patent: US 5605797-A 16 25-FEB-1997

FEATURES

Location/Qualifiers

1..28

/organism "unknown"

BASE COUNT 7 a 5 c 6 g 4 t 6 others

ORIGIN

Query Match

Best Local Similarity 61.9% Score 13; DB 6; Length 28;

Matches 13; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

QY 2 ATTCTGGGAATGCGGAG 21

111 111 111 111 111

DB 21 ATTCTGGGAATGCGGAG 2

RESULT 25

LOCUS A76106 33 bp DNA Linear PAT 19-OCT-1999

DEFINITION Sequence 45 from Patent WO9320210.

ACCESSION A76106

VERSION A76106.1 GI:6088247

KEYWORDS

SOURCE

ORGANISM

unidentified.

unclassified.

REFERENCE 1 (bases 1 to 33)

AUTHORS Taylor, G. and Stott, F.J.

TITLE ANTIBODIES FOR TREATMENT AND PREVENTION OF RESPIRATORY SYNCYTIAL

VIRUS INFECTION

JOURNAL Patent: WO 9320210 A 45 14-OCT-1993

FEATURES

Location/Qualifiers

1..33

/organism "unidentified"

/db\_xref "taxon:32644"

BASE COUNT 7 a 13 c 5 g 8 t

ORIGIN

Query Match

Best Local Similarity 76.2% Score 13; DB 6; Length 33;

Matches 13; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 GATTCATGGAGCGCCGCTGG 21

1111111 111 111

DB 12 GATTCATGGAGCGCCGCTGG 42

Search completed: March 18, 2003, 11:26:18  
Job Time : 509.694 secs



Genome version 5.1.4 p5.4578  
Copyright (c) 1993 - 2003 CompuGen Ltd.

om nucleic: nucleic search, using sw model

Run on: March 18, 2003, 10:48:56 : Search time 116.661 Seconds  
(without alignments)  
406.426 Million cell updates/sec

Title: US 09-900-115-2

Perfect score: 21

Sequence: 1 qaccatqacqaccccccq z1

Scoring table: IDENTITY\_NUP

Gapop 10.0 : Gapext 1.0

Searched: 2185249 seqs, 112599159 residues

Total number of hits satisfying chosen parameters: 2166140

Minimum hit seq length: 0

Maximum hit seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : N\_Geneseq\_101002.\*

1: /SID82/acqdata/geneseq/geneseq-emb1/NA1980.DAT.\*  
2: /SID82/acqdata/geneseq/geneseq-emb1/NA1981.DAT.\*  
3: /SID82/acqdata/geneseq/geneseq-emb1/NA1982.DAT.\*  
4: /SID82/acqdata/geneseq/geneseq-emb1/NA1983.DAT.\*  
5: /SID82/acqdata/geneseq/geneseq-emb1/NA1984.DAT.\*  
6: /SID82/acqdata/geneseq/geneseq-emb1/NA1985.DAT.\*  
7: /SID82/acqdata/geneseq/geneseq-emb1/NA1986.DAT.\*  
8: /SID82/acqdata/geneseq/geneseq-emb1/NA1987.DAT.\*  
9: /SID82/acqdata/geneseq/geneseq-emb1/NA1988.DAT.\*  
10: /SID82/acqdata/geneseq/geneseq-emb1/NA1989.DAT.\*  
11: /SID82/acqdata/geneseq/geneseq-emb1/NA1990.DAT.\*  
12: /SID82/acqdata/geneseq/geneseq-emb1/NA1991.DAT.\*  
13: /SID82/acqdata/geneseq/geneseq-emb1/NA1992.DAT.\*  
14: /SID82/acqdata/geneseq/geneseq-emb1/NA1993.DAT.\*  
15: /SID82/acqdata/geneseq/geneseq-emb1/NA1994.DAT.\*  
16: /SID82/acqdata/geneseq/geneseq-emb1/NA1995.DAT.\*  
17: /SID82/acqdata/geneseq/geneseq-emb1/NA1996.DAT.\*  
18: /SID82/acqdata/geneseq/geneseq-emb1/NA1997.DAT.\*  
19: /SID82/acqdata/geneseq/geneseq-emb1/NA1998.DAT.\*  
20: /SID82/acqdata/geneseq/geneseq-emb1/NA1999.DAT.\*  
21: /SID82/acqdata/geneseq/geneseq-emb1/NA2000.DAT.\*  
22: /SID82/acqdata/geneseq/geneseq-emb1/NA2001A.DAT.\*  
23: /SID82/acqdata/geneseq/geneseq-emb1/NA2001B.DAT.\*  
24: /SID82/acqdata/geneseq/geneseq-emb1/NA2002.DAT.\*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | * Match | Query Length | ID       | Description          |
|------------|-------|---------|--------------|----------|----------------------|
| 1          | 21    | 100.0   | 21           | AA083650 | GF-beta type II r    |
| 2          | 14.8  | 70.5    | 20           | AA026981 | PCR primer used to   |
| 3          | 14.8  | 70.5    | 20           | AAA47934 | PCR primer used in   |
| 4          | 14.8  | 70.5    | 50           | AA011563 | Human secreted pro   |
| 5          | 14.2  | 67.6    | 46           | AA069519 | Human gene PRB-1     |
| 6          | 14.2  | 67.6    | 46           | AA064981 | Human prolactin-rich |
| 7          | 14.2  | 67.6    | 46           | AA017269 | Test sequence from   |
| 8          | 14.2  | 67.6    | 46           | ABK62760 | DNA binding molecu   |
| 9          | 14.8  | 65.7    | 18           | AA046728 | Type II phosphodi    |

|    |      |      |    |    |           |                     |
|----|------|------|----|----|-----------|---------------------|
| 10 | 14.8 | 65.7 | 23 | 20 | AA021215  | Zea mays pathogene  |
| 11 | 14.8 | 65.7 | 28 | 20 | AA055666  | Truncated collagen  |
| 12 | 14.8 | 65.7 | 29 | 17 | AA012540  | Rat V130 retroviru  |
| 13 | 14.8 | 65.7 | 30 | 20 | AA021205  | Zea mays pathogene  |
| 14 | 14.8 | 65.7 | 33 | 24 | AA023612  | Canine p53 cDNA an  |
| 15 | 14.2 | 64.8 | 43 | 20 | AA080213  | Maize PLE DNA amp   |
| 16 | 14.4 | 63.8 | 21 | 21 | AA058276  | Human P60290 hybr   |
| 17 | 14.4 | 63.8 | 21 | 22 | AA044489  | Human P60290 hybr   |
| 18 | 14.4 | 63.8 | 22 | 21 | AA050309  | Human TNF receptor  |
| 19 | 14.4 | 63.8 | 22 | 21 | AA033767  | PCR primer for amp  |
| 20 | 14.2 | 62.9 | 19 | 20 | AA080220  | Maize PLE gene and  |
| 21 | 14.2 | 62.9 | 23 | 21 | AA097994  | R. subtilis STRA-B  |
| 22 | 14.2 | 62.9 | 25 | 17 | AA035014  | TMF-1/11b1-metab    |
| 23 | 14.2 | 62.9 | 27 | 15 | AA058543  | p55 mouse Nuc prot  |
| 24 | 14.2 | 62.9 | 27 | 19 | AA07264   | VA-RNA3 reverse pr  |
| 25 | 14.2 | 62.9 | 30 | 23 | AB097742  | Endogenous human G  |
| 26 | 14.2 | 62.9 | 31 | 19 | AA017890  | Primer used to cdu  |
| 27 | 14.2 | 62.9 | 31 | 19 | AA017891  | Primer used to cdu  |
| 28 | 14.2 | 62.9 | 38 | 22 | AA075446  | Codon-opt imised HP |
| 29 | 14.2 | 62.9 | 39 | 20 | AA080210  | Maize PLE DNA amp   |
| 30 | 14.2 | 62.9 | 40 | 21 | AA099042  | Human LGR39 PCR p   |
| 31 | 14.2 | 62.9 | 50 | 22 | AA032246  | Human SNP oligonuc  |
| 32 | 14.2 | 62.9 | 17 | 17 | AA024163  | EGF directed phos   |
| 33 | 14.2 | 62.9 | 17 | 17 | AA058180  | 5'-guanosine cappe  |
| 34 | 14.2 | 62.9 | 21 | 17 | AA024164  | EGF directed phos   |
| 35 | 14.2 | 62.9 | 21 | 17 | AA058181  | Guanosine-capped a  |
| 36 | 14.2 | 62.9 | 25 | 21 | AA058120  | Pichia stipitis cy  |
| 37 | 14.2 | 62.9 | 28 | 18 | AA062441  | bovine beta-mannos  |
| 38 | 14.2 | 62.9 | 28 | 20 | AA064128  | bovine beta-mannos  |
| 39 | 14.2 | 62.9 | 30 | 14 | AA038863  | Wild type hgh DNA   |
| 40 | 14.2 | 62.9 | 36 | 21 | AA074777  | Human growth hormo  |
| 41 | 14.2 | 62.9 | 41 | 24 | AA043308  | Human parkinson's   |
| 42 | 14.2 | 62.9 | 50 | 22 | AA034327  | Human SNP oligonuc  |
| 43 | 12.8 | 61.0 | 19 | 24 | ABK33425  | Human TNF receptor  |
| 44 | 12.8 | 61.0 | 20 | 22 | AA003522  | Human Mus81 amplifi |
| 45 | 12.8 | 61.0 | 26 | 20 | AA060983  | Mouse lamp-1 stana  |
| 46 | 12.8 | 61.0 | 31 | 22 | AA030766  | Human single nucle  |
| 47 | 12.8 | 61.0 | 33 | 21 | AA029332  | Primer 1 for HLA-A  |
| 48 | 12.8 | 61.0 | 33 | 24 | AA040520  | ATP dependent RNA   |
| 49 | 12.8 | 61.0 | 47 | 21 | AA067588  | Human map-related   |
| 50 | 12.6 | 60.0 | 21 | 21 | AA045606  | PCR primer used to  |
| 51 | 12.6 | 60.0 | 21 | 24 | ABK65488  | Human single nucle  |
| 52 | 12.6 | 60.0 | 26 | 21 | AA094722  | Neurotrophin-4 (N   |
| 53 | 12.6 | 60.0 | 31 | 22 | AA029922  | Human single nucle  |
| 54 | 12.6 | 60.0 | 42 | 22 | AA072859  | Primer #1, Bmo S    |
| 55 | 12.6 | 60.0 | 39 | 22 | AA083418  | Flea serine protea  |
| 56 | 12.6 | 60.0 | 41 | 22 | AA068369  | Human immunophilin  |
| 57 | 12.6 | 60.0 | 50 | 22 | AA027825  | Human SNP oligonuc  |
| 58 | 12.6 | 60.0 | 50 | 22 | AA027826  | Human SNP oligonuc  |
| 59 | 12.6 | 60.0 | 50 | 22 | AA028286  | Human SNP oligonuc  |
| 60 | 12.6 | 60.0 | 50 | 22 | AA032019  | Human SNP oligonuc  |
| 61 | 12.6 | 60.0 | 50 | 24 | AA010706  | L11 adapted cDNA    |
| 62 | 12.6 | 60.0 | 50 | 24 | AA022814  | Human EBR2 extrac   |
| 63 | 12.4 | 59.0 | 17 | 18 | AA093092  | Epidermal growth f  |
| 64 | 12.4 | 59.0 | 17 | 20 | AA001062  | Mutant primer for   |
| 65 | 12.4 | 59.0 | 18 | 22 | AA013439  | Human CSF5 hyaluro  |
| 66 | 12.4 | 59.0 | 24 | 22 | AA059752  | Corrected human pr  |
| 67 | 12.4 | 59.0 | 24 | 24 | AB001715  | oligonucleotide ad  |
| 68 | 12.4 | 59.0 | 24 | 24 | AB007363  | oligonucleotide ad  |
| 69 | 12.4 | 59.0 | 25 | 17 | AA042297  | HIV-2(ST) vpx gene  |
| 70 | 12.4 | 59.0 | 25 | 22 | AA073747  | HIV-2st vpx coding  |
| 71 | 12.4 | 59.0 | 41 | 16 | AA092585  | Thormus thermophil  |
| 72 | 12.4 | 59.0 | 41 | 16 | AA092585  | Thormus thermophil  |
| 73 | 12.4 | 59.0 | 31 | 16 | AA092585  | Thormus thermophil  |
| 74 | 12.4 | 59.0 | 33 | 24 | AA052960  | Human AIP-dependent |
| 75 | 12.4 | 59.0 | 33 | 24 | AA052960  | Human dihydropyrid  |
| 76 | 12.4 | 59.0 | 46 | 22 | AA002991  | Human PCR primer f  |
| 77 | 12.4 | 59.0 | 50 | 21 | AA011168  | Human secreted pro  |
| 78 | 12.2 | 58.1 | 17 | 18 | AA076215  | Human IL4 receptor  |
| 79 | 12.2 | 58.1 | 17 | 20 | AA054010  | Human IL-4 recepto  |
| 80 | 12.2 | 58.1 | 17 | 21 | AA019576  | Human IL4 receptor  |
| 81 | 12.2 | 58.1 | 17 | 21 | AA033454  | Low adenosine anti  |
| 82 | 12.2 | 58.1 | 20 | 20 | AA0201949 | PCR primer used to  |

|   |     |      |      |    |    |           |                       |       |      |      |    |    |          |                       |
|---|-----|------|------|----|----|-----------|-----------------------|-------|------|------|----|----|----------|-----------------------|
| c | 85  | 12.2 | 58.1 | 21 | 21 | AAA52958  | Ret-1 GAD65 antisense | 156   | 11.8 | 56.2 | 31 | 22 | AA140522 | Human skeletal muscle |
| c | 84  | 12.2 | 58.1 | 21 | 22 | AA522045  | Human COL1A1 PCR p    | 152   | 11.8 | 56.2 | 36 | 24 | AAV42439 | SH-AR22 Lambda con    |
| c | 85  | 12.2 | 58.1 | 23 | 22 | AA563934  | Human tankyrase2 c    | 158   | 11.8 | 56.2 | 37 | 19 | AAV55514 | FL1 A receptor ago    |
| c | 86  | 12.2 | 58.1 | 24 | 19 | AAV40335  | Cytochrome P45011d    | c 159 | 11.8 | 56.2 | 38 | 20 | AA863370 | pcr primer p02K5.1    |
| c | 87  | 12.2 | 58.1 | 24 | 22 | AAV26203  | Gamma-crystalline     | 160   | 11.8 | 56.2 | 39 | 18 | AA138895 | Biopartite dicationic |
| c | 88  | 12.2 | 58.1 | 25 | 15 | AAQ74772  | Class 1 RRP heavy     | 161   | 11.8 | 56.2 | 39 | 22 | AA85342  | cDNA primer for PA    |
| c | 89  | 12.2 | 58.1 | 26 | 22 | AAH71600  | Informal cuttly       | c 162 | 11.8 | 56.2 | 41 | 19 | AAV50942 | Matze polymorphic     |
| c | 90  | 12.2 | 58.1 | 29 | 22 | AAH75449  | Human EP112 (cndm)    | c 163 | 11.8 | 56.2 | 41 | 19 | AAV50943 | Matze polymorphic     |
| c | 91  | 12.2 | 58.1 | 29 | 22 | AAH75451  | Human EP112 (cndm)    | c 164 | 11.8 | 56.2 | 41 | 19 | AAV47360 | Matze polymorphic     |
| c | 92  | 12.2 | 58.1 | 30 | 20 | AAZ08156  | R181 sequence-Spec    | c 165 | 11.8 | 56.2 | 41 | 19 | AAV47759 | Matze polymorphic     |
| c | 93  | 12.2 | 58.1 | 30 | 22 | AAH82190  | Interleukin 4 (IL     | 166   | 11.8 | 56.2 | 41 | 24 | AA140522 | ATP dependent RNA     |
| c | 94  | 12.2 | 58.1 | 30 | 22 | AA590413  | Wild-type IL-4 pep    | 167   | 11.8 | 56.2 | 41 | 24 | AA140523 | ATP dependent RNA     |
| c | 95  | 12.2 | 58.1 | 33 | 16 | AAH105191 | Mutant HSV-1 thym     | 168   | 11.8 | 56.2 | 42 | 18 | AA197208 | Kappa chain variab    |
| c | 96  | 12.2 | 58.1 | 33 | 20 | AA557638  | Codons 165-175 of     | c 169 | 11.8 | 56.2 | 45 | 22 | AAH22225 | Ant 1 A33 and tch a   |
| c | 97  | 12.2 | 58.1 | 33 | 20 | AA557641  | Human quanylate ki    | c 170 | 11.8 | 56.2 | 45 | 22 | AAH20090 | chimeric ant body     |
| c | 98  | 12.2 | 58.1 | 33 | 20 | AA515367  | Codons 165-175 of     | 171   | 11.8 | 56.2 | 47 | 15 | AAQ68647 | A33 heavy chain va    |
| c | 99  | 12.2 | 58.1 | 33 | 20 | AA515370  | Human quanylate ki    | 172   | 11.8 | 56.2 | 47 | 15 | AAQ68647 | A33 heavy chain va    |
| c | 100 | 12.2 | 58.1 | 33 | 24 | AAH53301  | beta-galactosidase    | 173   | 11.8 | 56.2 | 47 | 16 | AAQ80668 | Mouse light chain     |
| c | 101 | 12.2 | 58.1 | 35 | 14 | AAQ76995  | Human KA-2 recepto    | c 174 | 11.8 | 56.2 | 47 | 21 | AAZ68597 | Human map related     |
| c | 102 | 12.2 | 58.1 | 35 | 20 | AAZ27582  | PPAR cDNA amplifiy    | c 175 | 11.8 | 56.2 | 48 | 20 | AAH7189  | ZNF198 breakpoin      |
| c | 103 | 12.2 | 58.1 | 36 | 15 | AAQ56332  | Primer for histone I  | c 176 | 11.8 | 56.2 | 48 | 22 | AAH7661  | Human cdk1 ribozym    |
| c | 104 | 12.2 | 58.1 | 36 | 20 | AAH00902  | Mac48 cDNA modifiy    | c 177 | 11.8 | 56.2 | 50 | 22 | AA129806 | Human SNP of ribozym  |
| c | 105 | 12.2 | 58.1 | 36 | 21 | AAZ59876  | Molluscella alpina    | c 178 | 11.8 | 56.2 | 50 | 22 | AA134645 | Human SNP of ribozym  |
| c | 106 | 12.2 | 58.1 | 39 | 24 | AAH40348  | FAAH domain contai    | c 179 | 11.6 | 55.2 | 17 | 19 | AAV33181 | Porcine colostrum     |
| c | 107 | 12.2 | 58.1 | 39 | 24 | AAH50554  | PCR primer HK2 use    | 180   | 11.6 | 55.2 | 19 | 22 | AAH22274 | ox40 light chain tra  |
| c | 108 | 12.2 | 58.1 | 47 | 20 | AAZ01048  | Probe for human H5    | 181   | 11.6 | 55.2 | 20 | 15 | AAQ74670 | Asp-actin115, argin   |
| c | 109 | 12.2 | 58.1 | 50 | 22 | AAI29519  | Human SNP of lipome   | 182   | 11.6 | 55.2 | 20 | 18 | AAH50901 | Probe #15 for inte    |
| c | 110 | 12   | 57.1 | 23 | 20 | AA559664  | PCR primer used to    | 183   | 11.6 | 55.2 | 20 | 21 | AAZ89006 | Human alpha pcr p     |
| c | 111 | 12   | 57.1 | 23 | 22 | AA508356  | Human FasL, Fas L1    | 184   | 11.6 | 55.2 | 20 | 21 | AAZ89006 | Human alpha pcr p     |
| c | 112 | 12   | 57.1 | 23 | 24 | AA516278  | 5'-PCR primer for     | 185   | 11.6 | 55.2 | 20 | 22 | AAZ40733 | Human beta-actin      |
| c | 113 | 12   | 57.1 | 24 | 24 | AAH52958  |                       |       |      |      |    |    |          |                       |





















RESULT 7  
 AAX17269/c  
 ID AAX17269 standard; DNA: 46 BP.  
 XX  
 AC AAX17269;  
 XX  
 DT 06 MAY-1999 (first entry)  
 XX  
 DE Test sequence from human gene PRB3L for proline-rich protein 3L.  
 XX  
 KW Test sequence; DNA-binding molecule; screening sequence; human;  
 KW nucleic acid amplification; target; viral; ds.  
 XX  
 OS Homo. Sapiens.  
 XX  
 PN DS5866241-A.  
 XX  
 PD 09 FEB-1999.  
 XX  
 PF 07 JUN-1995; 950S-0475228.  
 XX  
 PR 20 FEB-1995; 940S-0171389.  
 PR 27 JUN-1995; 940S-0723618.  
 PR 23 SEP-1994; 920S-0996783.  
 PR 17 SEP-1993; 940S-0124946.  
 PR 07 JUN-1995; 950S-0475228.  
 XX  
 DA (GENE-) GENELABS TECHNOLOGIES INC.  
 XX  
 PI Andrews BM, Cantor CR, Edwards CA, Fry KE, Turin LM;  
 XX  
 DR WP1: 1999-152755/13.  
 XX  
 PT Determination of DNA sequence preference of a DNA-binding molecule  
 PT based on inhibition of binding of protein to oligonucleotide  
 PT sequence attached to test sequence  
 XX  
 PS Claim 3; Columns 237-238; 270pp; English.  
 XX  
 CC Sequences AAX17001 to AAX17600 represent specifically claimed target  
 CC test sequences that are used in the method of the invention of  
 CC determining the DNA sequence preference of a DNA-binding molecule. The  
 CC method comprises: (i) adding a test molecule and a DNA-binding protein to  
 CC a mixture of duplex DNA test oligonucleotides, each of the test  
 CC oligonucleotides having a test sequence adjacent to a screening sequence,  
 CC where the screening sequence binds to the DNA-binding protein with a  
 CC binding affinity that is independent of the DNA sequence of the test  
 CC sequence, and where the mixture of duplex DNA test oligonucleotides  
 CC includes several test sequences; (ii) incubating the test molecule, the  
 CC mixture of duplex DNA test oligonucleotides and the DNA-binding protein  
 CC for a time sufficient to permit binding of the test molecule to test  
 CC sequences in the duplex DNA; (iii) separating unbound test  
 CC oligonucleotides from test oligonucleotides bound to binding protein;  
 CC (iv) amplifying the unbound test oligonucleotides; (v) repeating steps  
 CC (ii) to (iv); (vi) isolating the amplified test oligonucleotides; and  
 CC (vii) sequencing the isolated test oligonucleotides. Test sequences  
 CC AAX17001-X17481 and AAX17600 correspond to promoter targets for human  
 CC genes and test sequences AAX17482-X17599 correspond to promoter targets  
 CC for viral genes.  
 XX  
 SQ Sequence 46 BP; 7 A; 14 C; 10 G; 15 T; 0 other;

Query Match 67.68; Score 14.2; DB 20; Length 46;  
 Best Local Similarity 84.28; Pred. No. 3.7e-03;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1 GAGGATAGGAGAGGCGGCT 19  
 ||| ||||| ||||| |||||  
 DB 4 GAGGATAGGAGAGGCGGCT 25

RESULT 8  
 AAK82760/c  
 ID AAK82760 standard; DNA: 46 BP.  
 XX  
 AC AAK82760;  
 XX  
 DT 27 AUG-2002 (first entry)  
 XX  
 DE DNA binding molecule screening method test sequence #269.  
 XX  
 KW DNA binding molecule screening; inhibition of transcription;  
 KW infection; human immunodeficiency virus; HIV; parasite; cancer;  
 KW cardiovascular; respiratory; gastrointestinal; endocrine; metabolic;  
 KW rheumatic; immunologic; haematological; neurological;  
 KW psychiatric; dermatological; ophthalmological; musculo-skeletal;  
 KW oncological disorder; ss.  
 XX  
 OS Synthesized.  
 XX  
 PN DS6484208-R1.  
 XX  
 PD 07 MAY-2002.  
 XX  
 PF 15 JUL-1999; 990S-054947.  
 XX  
 PR 20 FEB-1995; 940S-0171389.  
 PR 07 JUN-1995; 950S-0482080.  
 PR 27 JUN-1994; 940S-0724618.  
 PR 23 SEP-1993; 920S-0996783.  
 PR 17 SEP-1993; 940S-0124946.  
 XX  
 DA (GENE-) GENELABS TECHNOLOGIES INC.  
 XX  
 PI Edwards CA, Cantor CR, Andrews BM, Turin LM, Fry KE;  
 XX  
 DR WP1: 2002-442819/47.  
 XX  
 PT Decreasing transcriptional activity of genes for treating infections of  
 PT cancer, by administration of an agent that binds to two non-overlapping  
 PT regions of the gene.  
 XX  
 PS Example 15; SEQ ID No 269; 98pp; English.  
 XX  
 CC The invention relates to a method of decreasing transcriptional activity  
 CC in a duplex deoxyribonucleic acid (DNA) template (T1) comprising  
 CC a coding (T1) with a binding agent comprising at least one small duplex  
 CC DNA binding molecule (T2) coupled to at least one other small duplex-  
 CC binding molecule that binds to a non-overlapping region of target  
 CC sequence (TS). The method is useful for inhibiting transcription of a  
 CC range of disease-related genes for treating infections (by viruses,  
 CC including human immunodeficiency virus, bacteria, fungi, protozoa  
 CC and parasites), cancer, cardiovascular, respiratory, gastrointestinal,  
 CC endocrine/metabolic, rheumatic/immunological, haematological,  
 CC neurological, psychiatric, dermatological, ophthalmological,  
 CC musculo-skeletal, genetic or urogenital disorders. The method provides  
 CC sequence-specific inhibition of transcription of pathological genes  
 CC without affecting transcription of cellular genes regulated by the same  
 CC transcription factor, and can be applied to regulation of any gene.  
 CC AAK82492-AAK83155 represent DNA binding molecule test sequences used in  
 CC the method of the invention.  
 XX  
 SQ Sequence 46 BP; 7 A; 14 C; 10 G; 15 T; 0 other;

Query Match 67.68; Score 14.2; DB 24; Length 46;  
 Best Local Similarity 84.28; Pred. No. 3.7e-03;  
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1 GAGGATAGGAGAGGCGGCT 19  
 ||| ||||| ||||| |||||  
 DB 4 GAGGATAGGAGAGGCGGCT 25

RESULT 9

```

AAH46/28
ID  AAH46/28 standard; DNA; 18 BP.
XX
AC  AAH46/28;
XX
DI  19 SEP 2001 (first entry)
XX
DE  Type 11 phosphodiesterase coding sequence PCR primer SEQ ID NO: 24.
XX
KW  Human; type 11 phosphodiesterase; pDE11; signal transduction; rny;
KW  selective inhibition; PCR primer; ss.
XX
OS  unidentified.
XX
IN  W020014646.A1.
XX
ID  28 JUN 2001.
XX
XX  22 DEC 2000; 2000W030911B.
XX
PR  22 DEC 1999; 99JP0364866.
XX
PR  01 JUN 2000; 2000JP0164875.
XX
PA  (TANA) TANARE SEIYAKU CO.
XX
PI  omori K., Yuasa K., Kotera J., oda K., Michibata H;
XX
WP1: 2001-418074/44.
XX
XX  Type 11 phosphodiesterases and encoded genes with activity of
XX  hydrolyzing cyclic nucleotides, useful for studying intracellular
XX  signal transduction mechanism and in screening highly-selective
XX  inhibitors as drugs with superior efficacy.
XX
PS  Example 3; Page 61; 77pp; Japanese.
XX
XX  The present invention provides the protein and coding sequences of novel
XX  human and rat type 11 phosphodiesterases (pDE11). These are useful for
XX  studying intracellular signal transduction mechanisms, in screening
XX  highly-selective inhibitors as drugs for treating diseases associated
XX  with the enzymes and for the identification or selection of selective
XX  inhibitory action against multiple type phosphodiesterases. The present
XX  sequence is a PCR primer for a coding sequence of the invention.
XX
SQ  Sequence 18 BP; 3 A; 7 C; 5 G; 3 T; 0 other;

Query Match 65.7%; Score 13.8; DB 22; Length 18;
Best Local Similarity 88.2%; Prod. No. 5,6006;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY  1 GAGGATGGGAGGCGGCG 17
ID  111111111111111111
DB  2 GATGATGGGAGGCGGCG 18

RESULT 10
AAZ21215/c
ID  AAZ21215 standard; DNA; 24 BP.
XX
AC  AAZ21215;
XX
ID  22 NOV 1999 (first entry)
XX
XX  Zea mays pathogenesis related class 1 PCR primer SEQ ID NO: 45.
XX
XX  Zea mays; maize; pathogenesis related class 1; PR 1; promoter;
XX  regulation; expression; disease resistance; genetic manipulation;
XX  tobacco mosaic virus; cucumber mosaic virus; ringspot virus;
XX  necrosis virus; maize dwarf virus; viroid; bacterial; insect;
XX  nematode; fungal; PCR primer; ss.
XX
OS  Synthetic.
XX
PI  Anderson P., Bergey P.L., Daniels RM., Farrington CK; ;
PI  Gibbs MB., Morgan H., Williams DP;
XX

```

```

XX
IN  W09943819.A1.
XX
ID  02 SEP 1999.
XX
XX  11 FEB 1999; 99WO0504011.
XX
PR  26 FEB 1998; 9803 0076100.
XX
PR  27 MAR 1998; 9803 0076448.
XX
XX  (FIN) FINEER H1 RPEB IN1 IN1.
XX
XX  Crane WC;
XX
XX  WP1: 1999 527621/44.
XX
XX  New promoter sequences from pathogenesis related genes of maize.
XX
XX  Example 3; Page 38; 86pp; English.
XX
XX  AAZ21186 to AAZ21190 represents the nucleotide sequences for promoters
XX  isolated from a family of maize (Zea mays) genes encoding pathogenesis
XX  related (PR 1) proteins. The promoters are useful for expressing
XX  heterologous genes (including genes for disease resistance) in plants,
XX  especially dicots, or monocots i.e. maize. The promoters are useful for
XX  the genetic manipulation of plants to exhibit specific phenotypes,
XX  particularly enhanced resistance to pathogen-caused disease. Pathogens
XX  include viruses such as tobacco or cucumber mosaic virus, ringspot
XX  virus, necrosis virus, and maize dwarf virus, and viroids, bacteria,
XX  insects, nematodes and fungi. The present sequence represents a PCR
XX  primer used for amplifying maize PR-1 proteins used in an example from
XX  the present invention.
XX
SQ  Sequence 23 BP; 4 A; 8 C; 8 G; 3 T; 0 other;

Query Match 65.7%; Score 13.8; DB 20; Length 24;
Best Local Similarity 88.2%; Prod. No. 5,6006;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY  5 GATGGAGGCGGCGGCG 21
ID  111111111111111111
DB  24 GATGGAGGCGGCGGCG 7

RESULT 11
AAZ5666
ID  AAZ5666 standard; DNA; 28 BP.
XX
AC  AAZ5666;
XX
ID  30 JUL 1999 (first entry)
XX
XX  Truncated cellulase gene tokR6.1 amplifying primer.
XX
XX  Cellulase; proteinase; truncated; Cel R; Cel R4/5; Cel E1; Cel E1/2;
XX  Cel 1/2/3; Cel 6; Cel 4/3/6; laundry detergent; stain remover;
XX  cotton containing fabric; stonewashing; tokR6.1; PCR primer; ss.
XX
OS  Synthetic.
XX
XX  EF921186.A2.
XX
ID  09 JUN 1999.
XX
XX  15 SEP 1998; 98EP0810919.
XX
PR  19 SEP 1997; 97US0932571.
XX
XX  (CLRN) CLARKANT FINANCE RV1 LTD.
XX
XX  Anderson P., Bergey P.L., Daniels RM., Farrington CK; ;
XX  Gibbs MB., Morgan H., Williams DP;
XX

```

DR WPI: 1999-015404/27.  
 XX New truncated cellulase proteins, useful in detergents and for  
 PI producing 'stone-washed' denim  
 XX  
 XX Disclosure: Page 63; 65pp; English.  
 XX  
 CC The invention relates to a recombinant cellulase active protein tree of  
 CC proteinases of native thermophilic and alkaliphilic origin, comprising  
 CC the truncated sequences Cel B5, Cel B4/5, Cel E1, Cel E1/2, Cel 1/2/3,  
 CC Cel 6, or Cel E3/B5, or a stability region from one of the defined full-  
 CC length sequences, or functional equivalents. Cel B5 extends from amino  
 CC acid A1011 to P1424 or N1425 or N1426, and Cel B4/5 extends from amino  
 CC acid K635 to N1426 in the sequence shown in AAY13492; Cel E1 extends  
 CC from amino acid Y39 to D481, Cel E1/2 extends from Y49 to G635, Cel  
 CC E1/2/3 extends from Y39 to G412, Cel E6 extends from amino acid V1233 to  
 CC K1751 and the stability region extends from amino acid E482 to G635 in  
 CC the sequence shown in AAY14491; Cel E3/B5 is shown in AAY14494. The new  
 CC enzymes are useful in laundry detergent compositions to prevent or  
 CC remove staining, backstaining or graying, for use on cellulosic  
 CC materials including cotton-containing fabrics, they are especially useful  
 CC for preventing redeposition of colorant during stonewashing, and for  
 CC processing of textiles where cellulose breakdown is required. The new  
 CC truncated enzymes show reduced redeposition of dye compared to using  
 CC non-truncated cellulase compositions.  
 XX  
 XX Sequence 28 BP; 8 A; 10 C; 4 G; 6 T; 0 other;  
 SU  
 Query Match: 65.7%; Score 13.8; 1B 20; Length 28;  
 Best Local Similarity 88.2%; Pred. No. 5,6e+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2 AACCAAGGCAAGCGCG 18  
 1111111111111111  
 1B 5 AACCAAGGCAAGCGCG 21  
 AAT12540  
 AAT12540 standard; DNA; 29 BP.  
 AC AAT12540;  
 XX  
 XX 06-SEP-1996 (first entry)  
 XX  
 XX Rat VL30 retrotransposon nucleotides 205-794 PCR primer.  
 XX  
 KW Retrotransposon; mobile genetic element; murine; IRES; encapsidation;  
 KW Internal ribosome entry site; viral vector; gene therapy; expression;  
 KW Improvement; dielstronic; polymerase chain reaction; Rattus; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX W09601624 A2.  
 PN W09601624 A2.  
 XX  
 XX 18-JAN-1996.  
 PD  
 XX 05-JUL-1995; 95WO-FR00894.  
 PF  
 XX 05-JUL-1994; 94FR-0008400.  
 PR  
 XX (INRM) INSEEM INST NAT SAMIE & RECH MEDICALE.  
 PA  
 XX Bettluz C., Barlix JL., Jacquemond S., Torrent C.  
 P1  
 XX WPI: 1996-087674/09.  
 DR  
 XX Isolated DNA contg. internal ribosome entry site or encapsidation  
 PI sequence - derived from retrotransposon, providing stable  
 PT expression of one or more genes, useful in gene therapy vectors  
 XX  
 XX Example 1; Page 29; 40pp; French.  
 PS  
 XX

CC Three plasmid constructs were prepared in which different  
 CC fragments of the rat VL30 retrotransposon were inserted between  
 CC a neomycin resistance gene and a lacZ gene. Expression of the  
 CC dielstronic cassette neo-VL30-lacZ was under the control of the  
 CC 17 RNA polymerase promoter (for in vitro expression) or the  
 CC cytomegalovirus early promoter (for expression in eukaryotic  
 CC cells). The level of expression from both genes was determined for  
 CC each construct. The best results were obtained from a plasmid  
 CC comprising nucleotides 380-794 of rat VL30, suggesting that this  
 CC region includes an internal ribosome entry site (IRES) which allows  
 CC expression of both genes. The present sequence is that of a PCR  
 CC primer used for amplifying the 205-794 fragment of VL30.  
 XX  
 XX Sequence 29 BP; 8 A; 13 C; 6 G; 2 T; 0 other;  
 SU  
 Query Match: 65.7%; Score 13.8; 1B 17; Length 29;  
 Best Local Similarity 88.2%; Pred. No. 5,6e+03;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1 GACCAAGGCAAGCGCG 17  
 1111111111111111  
 1B 7 GACCAAGGCAAGCGCG 23  
 AAZ21205;  
 AAZ21205 standard; DNA; 40 BP.  
 XX  
 XX AAZ21205;  
 XX  
 XX 22-NOV-1999 (first entry)  
 XX  
 XX Zea mays pathogenesis-related class 1 PCR primer SEQ ID NO:26.  
 XX  
 XX Zea mays; maize; pathogenesis-related class 1; PR-1; promoter;  
 KW regulation; expression; disease resistance; genetic manipulation;  
 KW Tobacco mosaic virus; cucumber mosaic virus; Tobacco etch virus;  
 KW necrosis virus; maize dwarf virus; viroid; bacterial; insect;  
 KW nematode; fungal; PCR primer; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX Zea mays.  
 XX  
 XX W0994819-A1.  
 PN W0994819-A1.  
 XX  
 XX 02-SEP-1999.  
 XX  
 XX 11-FEB-1999; 99WO-US04011.  
 PF  
 XX 26-FEB-1998; 980S-0076100.  
 PR  
 XX 27-MAR-1998; 980S-0079048.  
 XX  
 XX (D1-0N) P1-NPEK H1-BRED INT INC.  
 PA  
 XX Crane W.  
 XX  
 XX WPI: 1999-027621/44.  
 P1  
 XX New promoter sequences from pathogenesis related genes of maize.  
 XX  
 XX Example 1; Page 46; 86pp; English.  
 PS  
 XX  
 XX AAZ21190 to AAZ21190 represents the nucleotide sequences for promoters  
 CC isolated from a family of maize (Zea mays) genes encoding pathogenesis  
 CC related (PR-1) proteins. The promoters are useful for expressing  
 CC heterologous genes (including genes for disease resistance) in plants,  
 CC especially dicots, or monocots i.e. maize. The promoters are useful for  
 CC the genetic manipulation of plants to exhibit specific phenotypes,  
 CC particularly enhanced resistance to pathogen-caused disease. Pathogens  
 CC include viruses such as tobacco or cucumber mosaic virus, rusted  
 CC virus, necrosis virus, and maize dwarf virus, and viroids, bacteria,  
 CC insects, nematodes and fungi. The present sequence represents a PCR  
 CC primer used for amplifying maize PR-1 proteins used in an example from

```

cc the present invention.
SQ Sequence 40 BP; 7 A; 8 C; 11 G; 4 T; 0 other;

Query Match: 65.7%; Score 14.8; DB 20; Length 40;
Best Local Similarity 80.0%; Prod. No. 5.6e+04;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 CCAAGGAGGAGGAGGAGG 20
|||||
DB 17 CCAAGGAGGAGGAGG 1

RESULT 14
AA024612/c
ID AA024612 standard; DNA: 43 BP.
XX
AC AA024612;
XX
DE 07 MAR 2002 (first entry)
XX
DE Canine p53 cDNA amplifying RT-PCR primer, 5' up/np53dn.
XX
KW Canine; p53 protein; tumour-associated mutation; p53-dependent cancer;
KW anti-cancer therapy; reverse transcriptase; RT; PCR primer; ss.
XX
OS Canis sp.
XX
PN DS6307046 BL.
XX
PD 23 OCT 2001.
XX
PF 25 FEB 1999; 99NS 0257580.
XX
PR 28 FEB 1998; 98GB 0004178.
XX
PA (YORK ) YORKSHIRE CANCER RES.
XX
PI Milner J, Veldhoen N;
XX
WP1: 2002 043267/04.
XX
XX
XX New Canine p53 nucleic acid and protein, useful for identifying
PI individual carriers of germ line p53 gene mutations, or for determining
PI the efficacy of anti cancer therapies based on p53 genetic status .
XX
PS Disclosure; Fig 1; 2pp; English.
XX
cc The invention relates to DNA encoding canine p53 protein. The p53 cDNA
cc can be used to isolate different p53 cDNA from higher vertebrate
cc organisms, to generate probes for cytogenetic screening of canine
cc tumours, to identify tumour-associated mutations of the canine p53
cc gene, to identify individual carriers of germ line p53 gene mutations
cc and determine breed disposition to p53-dependent cancers, to generate
cc tumour identified mutants for study, to study p53 dependent activities
cc in canine normal and tumour cells, to express p53 protein within in
cc vitro expression systems, to express p53 protein in prokaryotic and
cc eukaryotic in vivo expression systems, to determine the efficacy of
cc anti cancer therapies based on p53 genetic status and to generate
cc probes to assess changes in stability or expression of p53 in different
cc cell types. Canine p53 protein can be used as an antigen to generate
cc monoclonal antibodies that are directed to both conformation specific
cc epitopes and primary epitopes. The present sequence is a reverse
cc transcriptase (RT) PCR primer used to amplify canine p53 cDNA.
XX
SQ Sequence 43 BP; 4 A; 7 C; 12 G; 4 T; 7 other;

Query Match: 65.7%; Score 14.8; DB 24; Length 43;
Best Local Similarity 80.0%; Prod. No. 5.6e+04;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 4 CCAAGGAGGAGGAGG 18
|||||

```

---

```

DE 22 CCAAGGAGGAGGAGG 8
RESULT 15
AA080213
ID AA080213 standard; DNA: 43 BP.
XX
AC AA080213;
XX
DE 02 MAR 1999 (first entry)
XX
DE Maize PTE DNA amplifying primer.
XX
KW Maize; acyl-AcP thioesterase; enzyme; oleoyl AcP thioesterase; OFE; OFE;
KW palmitoyl AcP thioesterase; Transgenic plant; oil; fatty acid; promoter;
KW regulatory element; transcriptional terminator; PCR primer; ss.
XX
OS Synthetic.
OS Zea mays.
XX
PN W09850569 AZ.
XX
PD 12 NOV 1998.
XX
PF 22 APR 1998; 98W0 0508097.
XX
PR 05 MAY 1997; 97US 0045827.
XX
PA (1988 ) 19W AGS637180US 116.
XX
PI Armstrong K, Cowen NM, Folkerts O, Guo L, Rubin Wilson B;
PI Skokut T, Young S;
XX
WP1: 1999 04742/04.
XX
XX
XX Composition comprising a promoter regulatory element, acyl AcP
PI thioesterase coding sequence, and a terminator useful for, e.g.
PI production of plant oil with an altered fatty acid content
XX
PS Example 3; Page 123; 1pp; English.
XX
cc The invention relates to genes encoding maize acyl AcP thioesterase
cc enzymes. The enzymes especially, oleoyl AcP thioesterase (OFE) and
cc palmitoyl AcP thioesterase (PTE) can be used to create transgenic plants
cc having altered oil profiles. The invention provides a composition
cc comprising in a 5' to 3' direction: (i) a promoter regulatory element;
cc (ii) an acyl AcP thioesterase encoding nucleic acid isolated from maize,
cc and (iii) a transcriptional terminator. The compositions and plant cell
cc of comprising the compositions can be used to produce plant oil having
cc altered levels of fatty acids. The present sequence represents a primer
cc used for amplifying the maize PTE DNA.
XX
SQ Sequence 43 BP; 8 A; 16 C; 11 G; 8 T; 0 other;

Query Match: 64.8%; Score 14.6; DB 20; Length 43;
Best Local Similarity 80.0%; Prod. No. 6.8e+04;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 AAAAAGAGGAGGAGGAGG 21
|||||
DB 22 AAAAAGAGGAGGAGGAGG 41

RESULT 16
AA058276
ID AA058276 standard; DNA: 21 BP.
XX
AC AA058276;
XX
DE 29 JAN 2001 (first entry)
XX
DE Human p53-290 hybridization probe SEQ ID No.94.
XX

```

KW Human: tumour; diagnosis; neoplastic disease; neoplastic cell growth;  
 KW proliferation; tumorigenesis; identification; cancer; PCR primer;  
 KW hybridisation; probe; cytostatic; neurotropic; neuroprotective;  
 KW antineoplastic; immunosuppressive; immunostimulant; antineoplastic;  
 KW leukaemia; lymphoid malignancy; neuronal disorder; glioma disorder;  
 KW astrocytoma disorder; hypothalamic disorder; glioma disorder;  
 KW macrophage disorder; epithelial disorder; stromal disorder;  
 KW blastocyst disorder; inflammatory disorder; angiogenic;  
 KW immunologic disorder; ss.  
 KW  
 KW Homo sapiens.  
 KW  
 KW W0200054755 A2.  
 KW 14-SEP-2000.  
 KW  
 KW 04-JAN-2000; 2000W0-US00476.  
 KW  
 KW 08-MAR-1999; 99W0-US05028.  
 KW 02-JUN-1999; 99W0-US12452.  
 KW 24-JUN-1999; 99W0-US141047.  
 KW 07-JUL-1999; 99W0-US141048.  
 KW 26-JUL-1999; 99W0-US145698.  
 KW 30-NOV-1999; 99W0-US28313.  
 KW 20-DEC-1999; 99W0-US40911.  
 KW 05-JAN-2000; 2000W0-US00219.  
 KW  
 KW (GENE) GENENTECH INC.  
 KW  
 KW Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hillan KJ, Roy MA,  
 KW Watanabe CK, Wood WI;  
 KW  
 KW WPI: 2000-572270/54.  
 KW  
 KW Thirty pro polynucleotides encoding pro polypeptides, useful in the  
 KW treatment, diagnosis and prevention of cancer.  
 KW  
 KW Example 23: Page 133; 286pp; English.  
 KW  
 KW The present invention describes an isolated antibody that binds to  
 KW one of the human pro proteins designated PRO212, PRO290, PRO341, PRO535,  
 KW PRO619, PRO717, PRO809, PRO830, PRO848, PRO943, PRO1005, PRO1009,  
 KW PRO1025, PRO1030, PRO1097, PRO1107, PRO1111, PRO1153, PRO1182, PRO1184,  
 KW PRO1287, PRO1288, PRO1293, PRO139, PRO134, PRO1417, PRO1710, PRO2094,  
 KW PRO2145 or PRO2198. Pro antagonists can be used to inhibit tumour cell  
 KW growth. The pro polypeptides and nucleotides are useful in the  
 KW treatment, diagnosis and prevention of cancer. The antibodies and other  
 KW anti-tumour compounds may be used to treat various conditions, including  
 KW those characterised by overexpression and/or activation of the amplified  
 KW pro genes. Exemplary conditions of disorders to be treated with such  
 KW antibodies and other compounds include benign or malignant tumours  
 KW (e.g., renal, liver, kidney, bladder, breast, gastric, ovarian,  
 KW colorectal, prostate, pancreatic, lung, colon, thyroid, hepatic  
 KW carcinomas, sarcomas, glioblastomas, and various head and neck tumours),  
 KW leukemias and lymphoid malignancies, other disorders such as neuronal,  
 KW glioma, astrocytoma, hypothalamic and other glandular, macrophage,  
 KW epithelial, stromal and blastocyst disorders, and inflammatory,  
 KW angiogenic and immunologic disorders. AAC58242 to AAC58466 represent PCR  
 KW primers and hybridisation probes used in the isolation of the human pro  
 KW sequences. AAC58467 to AAC58496 and AAC24057 to AAC24089 represent human  
 KW pro polynucleotide and protein sequences given in the exemplification of  
 KW the present invention.  
 KW  
 KW Sequence 21 BP; 5 A; 11 C; 3 G; 2 T; 0 other;

Query Match 64.8%; Score 14.4; 18 21; Length 21;  
 Best local Similarity 94.3%; Pred. No. 8.4e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2 ACGACGGAGGCG 16  
 ||| ||||| |||||  
 bb 4 ACGACGGAGGCG 17

RESULT 17  
 AAF44489  
 ID AAF44489 Standard; DNA; 21 BP.  
 XX  
 XX AAF44489;  
 XX  
 XX 02 APR-2001 (first entry)  
 XX  
 XX Human: pro-240 hybridisation probe SEQ ID No:428.  
 XX  
 XX Homo sapiens.  
 KW  
 KW Human: secreted and transmembrane protein; pro; cytostatic;  
 KW cell death; cancer; chromosomal mapping; gene mapping; tissue typing;  
 KW diagnostic assay; PCR primer; hybridisation; probe; ss.  
 KW  
 KW Homo sapiens.  
 KW  
 KW W0200074454 A1.  
 KW 07-DEC-2000.  
 KW  
 KW 10-MAR-2000; 2000W0-US00449.  
 KW  
 KW 02-JUN-1999; 99W0-US12452.  
 KW 24-JUN-1999; 99W0-US141037.  
 KW 07-JUL-1999; 99W0-US141048.  
 KW 26-JUL-1999; 99W0-US144758.  
 KW 30-NOV-1999; 99W0-US145698.  
 KW 20-DEC-1999; 99W0-US146222.  
 KW 17-AUG-1999; 99W0-US149396.  
 KW 15-SEP-1999; 99W0-US21090.  
 KW 15-SEP-1999; 99W0-US21547.  
 KW 08-OCT-1999; 99W0-US158663.  
 KW 30-NOV-1999; 99W0-US28313.  
 KW 01-DEC-1999; 99W0-US28301.  
 KW 16-DEC-1999; 99W0-US30095.  
 KW 20-DEC-1999; 99W0-US30911.  
 KW 05-JAN-2000; 2000W0-US00219.  
 KW 06-JAN-2000; 2000W0-US00476.  
 KW 11-FEB-2000; 2000W0-US04565.  
 KW 18-FEB-2000; 2000W0-US04341.  
 KW 22-FEB-2000; 2000W0-US04414.  
 KW 24-FEB-2000; 2000W0-US04914.  
 KW 24-FEB-2000; 2000W0-US05004.  
 KW 02-MAR-2000; 2000W0-US05841.  
 KW 15-MAR-2000; 2000W0-US06884.  
 KW 20-MAR-2000; 2000W0-US07377.  
 KW  
 KW (GENE) GENENTECH INC.  
 KW  
 KW Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton LC,  
 KW Ferrara N, Ford S, Gerber H, Gottlieb ME, Goddard A, Godowski J,  
 KW Glomski CJ, Gurney AL, Kijavich JJ, Napier MA, Pan LC, Patel N,  
 KW Roy MA, Stewart LA, Thomas D, Watanabe CK, Williams PM, Wood WI,  
 KW Zhang Z;  
 KW WPI: 2001-032160/04.  
 KW  
 KW Pro polynucleotides used to produce polypeptides used to target  
 KW toxic molecules such as toxins, radiolabels or antibodies, to  
 KW specific cells, to cause targeted cell death.  
 KW  
 KW Example 17c: Page 640; 935pp; English.  
 KW  
 KW The present invention describes human secreted and transmembrane pro  
 KW proteins. The pro proteins have cytostatic activity. The pro proteins  
 KW can be used for targeted delivery of bioactive molecules, such as  
 KW toxins, radiolabels or antibodies, that cause cell death. Pro nucleic  
 KW acid sequences, and their fragments, can be used as hybridisation probes, in  
 KW chromosomal and gene mapping, and in the generation of anti-sense RNA  
 KW and DNA. They may also be used to produce transgenic animals which are  
 KW used to develop and screen therapeutically useful reagents. The pro  
 KW nucleotide and protein sequence can be used for tissue typing and in

cc Treating cancer. Anti-pro antibodies can be used in diagnostic assays.  
 cc AAF44270 to AAF44470 represent PCR primers and hybridisation probes used  
 cc in the isolation of human pro sequences. AAF44067 to AAF44269 and  
 cc AAF65154 to AAF65400 represent human pro polymorphisms and protein  
 cc sequences given in the exemplification of the present invention.  
 xx  
 sq Sequence 21 bp; 5 A; 11 C; 3 G; 2 T; 0 other;

Query Match 63.8%; Score 18.4; DB 22; Length 21;

Best Local Similarity 93.4%; Pred. No. 8.4e+04;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

cc 2 ACCATGCGAGGCG 16  
 ||| ||||| |||||  
 cc 3 ACCAATGCGAGGCG 17

## RESULT 18

AAA50409  
 ID AAA50409 standard; DNA: 22 bp.

xx AAA50409;

cc 20 NOV-2000 (first entry)

cc Human TNF receptor like protein TR11 cDNA 5' PCR primer.

cc TR11; human; tumor necrosis factor receptor like protein;

cc PCR primer; SS.

cc Homo Sapiens.

cc W0200050459 AL.

cc 31 AUG 2000.

cc 23 FEB-2000; 2000W0504572.

cc 24-FEB-1999; 90DS-0121648.

cc 14 MAY-1999; 90DS-0134172.

cc 16 JUL-1999; 90DS-0144076.

cc (HUMA ) HUMAN GENOME SET 1NC.

cc Ruben SM; Ni J.

cc WPI; 2000 5/2072/54.

cc Human tumor necrosis factor receptor like proteins useful for  
 cc diagnostics, prevention and treatment of disease states associated with  
 cc aberrant cell survival such as autoimmune disease and rheumatoid  
 cc arthritis

cc Example 1; Page 171; 278pp; English.

cc The present sequence is that of a 5' PCR primer comprising an NcoI  
 cc site followed by 18 nucleotides complementary to the N-terminal  
 cc coding sequence of the extracellular domain of TR11 (see AAF56879). A  
 cc novel human tumor necrosis factor receptor like protein. The  
 cc amplified TR11 cDNA was cloned into vector pQE60 for expression of  
 cc mature TR11 in *Escherichia coli*. The invention provides TR11,  
 cc TR11SV1 and TR11SV2 nucleic acids (see AAA50404-06) and proteins  
 cc (see AAF56879-81), vectors, host cells and recombinant methods for  
 cc their production, a method for screening for antagonists and  
 cc antagonists, and methods for using the polynucleotides,  
 cc polypeptides, antibodies, agonists and antagonists in the  
 cc treatment, diagnosis and prevention of disease states associated  
 cc with aberrant cell survival, immunodeficiency and autoimmune  
 cc disease.

cc Sequence 22 bp; 3 A; 12 C; 6 G; 1 T; 0 other;

Query Match 63.8%; Score 18.4; DB 21; Length 22;

Best Local Similarity 93.4%; Pred. No. 8.4e+04;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

cc 4 CCGATGCGAGGCG 17  
 ||||| ||||| |||||  
 cc 4 CCGATGCGAGGCG 17

## RESULT 19

AAZ47767  
 ID AAZ47767 standard; cDNA: 22 bp.

cc AAZ47767;

cc 01 FEB-2000 (first entry)

cc PCR primer for amplification of TR11 receptor extracellular domain.

cc Tumor necrosis factor receptor like protein; TR11; TR11SV1; TR11SV2;

cc G11P; growth; differentiation; cell death; immune deficiency disorder;

cc Inverse syndrome; HIV; Severe Wiskott Aldrich disorder; abnormal;

cc Still Man syndrome; arthritis; multiple sclerosis; diabetes; PCR primer;

cc Alzheimer's disease; Parkinson's disease; Huntington's disease; SS;

cc inflammatory condition.

cc Synthetic.

cc Homo Sapiens.

cc W09920768 AL.

cc 29-APR 1999.

cc 21 OCT 1998; 90W0522085.

cc 21 OCT 1997; 97DS 0063212.

cc (HUMA ) HUMAN GENOME SET 1NC.

cc Ni J; Ruben SM;

cc WPI; 2000 061922/05.

cc New tumor necrosis factor receptor like polypeptides used to, e.g.,  
 cc treat diabetic syndrome.

cc Example 1; Page 79; 163pp; English.

cc PCR primers AAZ47767/78768 are used to amplify the human tumor  
 cc necrosis factor receptor like protein (TR11) receptor (AAZ47762)  
 cc extracellular domain nucleic acid sequence. The invention relates to TR11  
 cc and two splice variants TR11SV1 and TR11SV2. The nucleic acid sequences  
 cc were determined by sequencing cloned cDNAs AAZ47765, 78766. The TR11  
 cc receptor and its splice variants show homology to the murine  
 cc glucocorticoid induced tumor necrosis factor receptor family related  
 cc gene (G11P). TR11, TR11SV1 and TR11SV2 polypeptides may be involved in  
 cc the regulation of cell type specific receptor mediated cell growth,  
 cc differentiation, and ultimately, cell death. They can be used for  
 cc screening for agonists/antagonists, the polypeptides, agonists or  
 cc antagonists can be used for treating a disease state associated with  
 cc aberrant cell survival. They can be used for treating immune deficiency  
 cc disorders, Inverse syndrome, HIV infection, severe combined  
 cc immunodeficiency (SCID), Wiskott Aldrich disorder, blood coagulation  
 cc disorders, blood platelet disorders or wounds resulting from trauma or  
 cc surgery. They can also be used to treat heart attacks, strokes, Addison's  
 cc disease, hemolytic anemia, rheumatoid arthritis, Goodpasture's syndrome,  
 cc Grave's disease, multiple sclerosis, myasthenia gravis, Still Man  
 cc syndrome, systemic lupus erythematosus, Guillain Barre syndrome, insulin  
 cc dependent diabetes mellitus or autoimmune inflammatory eye disease,  
 cc anaphylaxis, hypersensitivity to an antigenic molecule, organ rejection  
 cc or graft versus host disease, inflammatory conditions,  
 cc ischaemia reperfusion injury, complement mediated hyperacute rejection,  
 cc nephritis, cytokine or chemokine induced lung injury, inflammatory bowel  
 cc disease, Crohn's disease, hyperproliferative disorders, or infectious.

CC They can also be used to repair, replace, or protect tissue damaged by  
 CC congenital defects, trauma, age, disease, surgery, including cosmetic  
 CC plastic surgery, fibrosis, reperfusion injury, peripheral nerve injuries,  
 CC neuropathies, and central nervous system disease (e.g. Alzheimer's  
 CC disease, Parkinson's disease, Huntington's disease, amyotrophic lateral  
 CC sclerosis, and Shy-Drager syndrome). The products can also be used for  
 CC detection, diagnosis and prognosis.

XX Sequence 22 BP; 5 A; 12 C; 6 G; 1 T; 0 other;

Query Match 63.8%; Score 13.4; DB 21; Length 22;  
 Best Local Similarity 94.8%; Pred. No. 8.4e-04;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CCAAGGAGAGGCGG 17

DB 4 CCAAGGAGAGGCGG 17

RESULT 20

AAV80220

ID AAV80220 standard; DNA: 19 BP.

AC AAV80220;

XX AAV80220;

BT 02 MAR 1999 (first entry)

DE Maize PTE gene amplifying primer.

KW Maize: acyl-ACP thioesterase; enzyme: oleoyl-ACP thioesterase; OTE; PTE;  
 KW palmitoyl-ACP thioesterase; transgenic plant; oil; fatty acid; promoter;  
 KW regulatory element; transcriptional terminator; PCR primer; ss.

OS Synthesized.

ES Zea mays.

XX W0950569-A2.

PN W0950569-A2.

PD 12 NOV 1998.

XX 22 APR 1998; 98W0-0508097.

XX 05 MAY 1997; 97US-0045827.

XX (Dew) DEW AGRSCIENCES LLC.

PA Armstrong K., Cowen NM, Folkerts O., Guo L., Rubin-Wilson B;

PI Skokuf T., Young S;

XX WPI: 1999-034732/04.

XX Composition comprising a promoter regulatory element, acyl-ACP  
 PT thioesterase coding sequence, and a terminator - useful for, e.g.,  
 PT production of plant oil with an altered fatty acid content.

XX Example 7: Page 132; 179pp; English.

XX The invention relates to genes encoding maize acyl-ACP thioesterase  
 CC enzymes. The enzymes especially, oleoyl ACP thioesterase (OTE) and  
 CC palmitoyl-ACP thioesterase (PTE) can be used to create transgenic plants  
 CC having altered oil profiles. The invention provides a composition  
 CC comprising in a 5' to 3' direction: (i) a promoter regulatory element;  
 CC (ii) an acyl-ACP thioesterase encoding nucleic acid isolated from maize,  
 CC and (iii) a transcriptional terminator. The compositions and plant cell  
 CC of comprising the compositions can be used to produce plant oil having  
 CC altered levels of fatty acids. The present sequence represents a primer  
 CC used for amplifying the maize PTE gene.

XX Sequence 19 BP; 2 A; 10 C; 4 G; 3 T; 0 other;

Query Match

Best Local Similarity 62.9%; Score 13.2; DB 20; Length 19;

Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 CCAAGGAGAGGCGG 21

DB 4 CCAAGGAGAGGCGG 18

RESULT 21

AAV97994

ID AAV97994 standard; DNA: 24 BP.

AC AAV97994;

XX AAV97994;

BT 26 JAN 2001 (first entry)

XX B. subtilis StrA-B gene A domain PCR primer SEQ ID No: 35.

XX NPES: non-ribosomal peptide synthetase; adenylation domain; A domain;  
 KW PCR primer; antibiotic; immunosuppressant; cytostatic; antiviral;  
 KW antifolate; fungicidal; StrA-B gene; ss.

OS Bacillus subtilis.

ES W0200052152-A1.

PN W0200052152-A1.

PD 08 SEP 2000.

XX 28 FEB 2000; 2000W0 EP01652.

XX 03 MAR 1999; 99EP-1009146.

XX (MARA/) MAPAHIEL M A.

XX (STAV/) STACHENBAUS T.

XX (MOL/) MOUL H.

XX (KONZ/) KONZ D.

XX Marahel MA, Stachthaus T, Mootz H, Konz D;

XX WPI: 2000-572182/54.

XX Non-ribosomal synthesis of peptides, e.g. antibiotics or

XX immunosuppressants, using non-ribosomal peptide synthase with targeted

XX modifications to adenylation domains -

XX Example 5: Page 43; 52pp; German.

XX This invention describes a novel method for the targeted non-ribosomal

XX synthesis of peptides (I) of required structure, comprising altering one

XX or more A (adenylation) domain-encoding DNA sequents (II) that encodes a

XX non-ribosomal peptide synthetase so that the expression product of the

XX altered (II) can produce (I). is new. Alterations in the A-domains are

XX made according to a non-ribosomal code reproduced in the specification.

XX This method is used to synthesize (I) with antibiotic, immunosuppressant,

XX cytostatic, antiviral, antihelminthic, fungicidal or surface-active

XX properties, and to alter specificity and/or activity of known

XX biologically active compounds, e.g. to improve their solubility by

XX replacing hydrophobic amino acids with hydrophilic ones, or vice versa.

XX AAV97960-A97995 represent PCR primers used to illustrate the method of

XX the invention.

XX Sequence 24 BP; 7 A; 4 C; 8 G; 4 T; 0 other;

Query Match 62.9%; Score 13.2; DB 21; Length 24;

Best Local Similarity 84.8%; Pred. No. 1e-04;

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4 CCAAGGAGAGGCGG 21

DB 4 CCAAGGAGAGGCGG 6

RESULT 22

AA145014

ID AA145014 standard; DNA: 25 BP.

XX AA135014;  
 XX 16-oct-1996 (first entry)  
 DE T1MP 1/tibronectin chimERIC protein construction primer.  
 XX  
 KW T1MP: tissue inhibitor of metalloproteinase; basal lamina; breakdown;  
 KW polymerase chain reaction; PCR; primer; chimera; therapy; metastasis;  
 KW ECM; extracellular matrix; targeting; ss.  
 XX  
 OS Synthetic.  
 XX  
 FN JF08140677 A.  
 XX  
 PD 04-JUN-1996.  
 XX  
 PF 28-JAN-1994; 94JP-0008248.  
 XX  
 PR 28-JAN 1994; 94JP-0008248.  
 XX  
 PA (KAGG) KAGAKU G10TSDCHPO CHP-KAN KANRO.  
 XX  
 PR WPI: 1996 416413/42.  
 XX  
 PT chimERIC protein comprising heterologous protein inserted into  
 PT fibronectin - can be used to target proteins to the extracellular  
 PT matrix  
 XX  
 PS Example 1: Page 4; 7pp; Japanese.  
 XX  
 CC AA135014: 135021 are PCR primers used in the amplification and  
 CC construction of parts of vectors which encode a chimERIC protein  
 CC which comprises fibronectin and T1MP-1 (tissue inhibitor of  
 CC metalloproteinase-1). The protein is useful to target T1MP-1 to the  
 CC extracellular matrix (ECM), when it may be needed there e.g. to  
 CC prevent metastasis of cancerous cells; other therapeutic proteins may  
 CC be used instead of T1MP-1 e.g. protein A immunoglobulin G binding  
 CC region.  
 XX  
 SQ Sequence 25 BP; 6 A; 9 C; 7 G; 3 T; 0 other;  
 Query Match 62.9%; Score 13.2; DB 17; Length 25;  
 Best Local Similarity 83.4%; Pred. No. 1004;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1 GAGGACAGGAGAGGAGGAG 18  
 1 TTTTTTTT TTTTTT  
 DB 1 GAGGACAGGAGAGGAGGAG 18  
 RESULT 24  
 AAQ58543  
 ID AAQ58543 standard; DNA: 21 BP.  
 AC  
 XX AAQ58543;  
 XX  
 PT 21-SEP 1994 (first entry)  
 DE p55 mouse Nuc protein N-terminal primer.  
 XX  
 KW Nuc protein; nucleobinding; antibody; autoimmune disease;  
 KW augmenting factor; DNA binding; p55; primer; PCR; protein;  
 KW polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 FN JF06025292 A.  
 XX  
 PD 01-FEB-1994.  
 XX  
 PF 30-oct-1991; 94JP-0349406.  
 XX

PR 31-oct-1990; 96JP-0294055.  
 PR 26-NOV 1990; 96JP-0324888.  
 XX  
 PA (KAGG) KAKUEN F.  
 PA (BRIK) MITSUJI-TAISU-CHEN INC.  
 PA (YOSH) YOSHIYUKI KANAI CHE.  
 XX  
 PR WPI: 1994 077475/10.  
 XX  
 PT Anti-DNA and antibody produ. augmenting factor and antibodies to  
 PT it, useful for diagnosis and treatment of autoimmune disease  
 XX  
 PS Disclosure; Page 1; 29pp; Japanese.  
 XX  
 CC Nuc protein binds DNA and augments anti-DNA and antibody produ. The  
 CC protein is from human or mouse tissue or cells, esp. lymphocytes.  
 CC Anti-nuc protein and antibodies may be used to treat diseases involving  
 CC produ. of large amts. of DNA binding protein, e.g. autoimmune  
 CC disease.  
 XX  
 SQ Sequence 27 BP; 3 A; 10 C; 10 G; 4 T; 0 other;  
 Query Match 62.9%; Score 13.2; DB 15; Length 27;  
 Best Local Similarity 83.4%; Pred. No. 1004;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 4 CCAATGGAGAGGAGGAGG 21  
 TTTTTTTT TTTTTT  
 DB 5 CCAATGGAGAGGAGGAGG 22  
 RESULT 24  
 AAQ072643  
 ID AAQ07264 standard; DNA: 27 BP.  
 AC  
 XX AAQ07264;  
 XX  
 PT 28-SEP-1998 (first entry)  
 XX  
 DE VA RNA3 reverse primer 4006E.  
 XX  
 KW Adenovirus 3; Ad5; vector; gene therapy; DNA polymerase; PCR;  
 KW primer; VA RNA3; ss.  
 XX  
 OS Synthetic.  
 OS Mastadenovirus 3.  
 XX  
 PR W0981783 A1.  
 XX  
 PD 30-APR 1998.  
 XX  
 PF 24-oct-1997; 97W0-D819541.  
 XX  
 PR 24-oct-1996; 96US-075609.  
 XX  
 PA (UNM) UNIV MICHIGAN.  
 XX  
 PT Ananthan A, Chamberlain JS, Bartigan O'Connor M;  
 PT Bausor MA, Kumar Sinha;  
 XX  
 PR WPI: 1998 261485/23.  
 XX  
 CC New adenoviral recombinant plasmid(s) comprise sequences provided  
 CC for expression of large torican DNA fragments, used for, e.g., gene  
 CC therapy of genetic disease(s)  
 XX  
 PS Example 1a: Page 44; 13pp; English.  
 XX  
 CC Reverse primer 4006E contains sequences complementary to  
 CC nucleotides 1109-11107 of pBBE1 (see AAQ07264), an E1-deleted  
 CC adenovirus (Ad) genome, and also contains a 5' Rsp6I site. It was  
 CC used with forward primer 4005E (see AAQ07264), which is complementary  
 CC to nucleotides 12551-12571 of pBBE1, in the PCR amplification of a



CC 1.6 kb DNA fragment (see AAV07265) comprising the VA-RNA3 sequence  
CC and the third leader of the tri-partite leader sequence. H5Ts36  
CC virus DNA was used as template. The PCR product was used in the  
CC construction of claimed plasmid pAXdelipolipVPVARNAt13, which  
CC contains a 2.3 kb deletion within the Ad polymerase and preterminal  
CC protein genes and which lacks the 11.4 kb BamHI fragment containing  
CC the right arm of the Ad genome. Such constructs have a large  
CC cloning capacity and provide improved adenoviral vectors useful for  
CC a wide variety of gene therapy applications.  
XX  
SQ Sequence 27 BP; 3 A; 8 C; 13 G; 3 T; 0 other;

Query Match 62.9%; Score 13.2; DB 19; Length 27;  
Best Local Similarity 83.3%; Pred. No. 1e-04;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAGGATATGAGGACGCGG 18  
db 1 | | | | | | | | | |  
24 GAGGATATGAGGACGCGG 6

RESULT 25  
AB197742  
ID AB197742 standard; DNA; 30 BP.  
XX  
AC  
XX AB197742;  
XX  
DT 18 FEB-2002 (first entry)  
XX  
DE Endogenous human GPCR 3' primer SEQ ID NO: 184.  
XX  
DE Human; G protein-coupled receptor; GPCR; non-endogenous; mutant;  
KW constitutively activated GPCR; agonist; disease; PCR primer; ss.  
XX  
XX Homo sapiens.  
XX  
XX W0206177172-A2.  
XX  
XX 18-OCT-2001.  
XX  
XX 05-APR-2001; 2001WB-US11098.  
XX  
XX 07-APR-2000; 2000US-195747P.  
XX  
XX (AFEN) ARENA PHARM INC.  
XX  
XX Lehmann-Bruinsma K, Liaw CW, Lin I;  
XX  
XX WP1: 2001-648759/74.  
XX  
XX Identifying agonists of G protein-coupled receptors (GPCRs) for use in  
XX disease treatment, comprises contacting candidate compounds with  
XX versions of GPCRs -  
XX  
XX Example 1; Page 45; 394pp; English.  
XX  
XX The invention relates to G protein-coupled receptors (GPCRs) for which  
XX the endogenous ligand has been identified. Non-endogenous  
XX constitutively activated versions of known GPCRs are used in the  
XX invention for the direct identification of candidate compounds as  
XX receptor agonists, inverse agonists or partial agonists. Such  
XX agonists are useful as therapeutic agents for diseases or disorders  
XX associated with GPCRs. The present sequence is a primer used to  
XX prepare an endogenous version of a known GPCR in an example  
XX illustrating the invention.  
XX  
SQ Sequence 30 BP; 5 A; 10 C; 12 G; 3 T; 0 other;

Query Match 62.9%; Score 13.2; DB 23; Length 30;  
Best Local Similarity 83.3%; Pred. No. 1e-04;  
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAGGATATGAGGACGCGG 18

db 1 | | | | | | | | | |  
5 GATTCAGGCGACGCGTCCG 22  
Search completed: March 18, 2004, 11:01:49  
Job time : 136.361 secs



















977 10.2 48.6 41 4 US-09 000 062 12 Sequence 12, Appl  
 c 978 10.2 48.6 41 4 US-09 389-705-1 Sequence 1, Appl  
 979 10.2 48.6 41 4 US-08-962-281-18 Sequence 18, Appl  
 980 10.2 48.6 41 4 US-08-962-281-25 Sequence 25, Appl  
 c 981 10.2 48.6 41 5 PCT-US94-00666-1 Sequence 1, Appl  
 c 982 10.2 48.6 43 3 US-08-874-825-45 Sequence 45, Appl  
 983 10.2 48.6 43 3 US-08-664-824-45 Sequence 45, Appl  
 c 984 10.2 48.6 43 4 US-08-542-634-29 Sequence 29, Appl  
 c 985 10.2 48.6 43 4 US-08-960-190A-2 Sequence 2, Appl  
 c 986 10.2 48.6 43 4 US-09-025-769B-424 Sequence 424, Appl  
 987 10.2 48.6 43 4 US-09-385-143-4 Sequence 4, Appl  
 c 988 10.2 48.6 43 4 US-09-231-303-45 Sequence 45, Appl  
 989 10.2 48.6 43 5 PCT-US95-13703-29 Sequence 29, Appl  
 c 990 10.2 48.6 44 2 US-08-596-387B-40 Sequence 40, Appl  
 c 991 10.2 48.6 44 4 US-09-067-615-40 Sequence 40, Appl  
 c 992 10.2 48.6 44 5 PCT-US95-09816A-40 Sequence 40, Appl  
 c 993 10.2 48.6 45 2 US-08-687-355A-23 Sequence 23, Appl  
 c 994 10.2 48.6 45 4 US-08-957-001B-10 Sequence 10, Appl  
 c 995 10.2 48.6 45 4 US-09-496-401-10 Sequence 10, Appl  
 c 996 10.2 48.6 45 4 US-09-199-637A-123 Sequence 123, Appl  
 c 997 10.2 48.6 45 4 US-09-407-469-23 Sequence 23, Appl  
 c 998 10.2 48.6 46 3 US-08-875-509-4 Sequence 4, Appl  
 c 999 10.2 48.6 46 4 US-09-383-143-5 Sequence 5, Appl  
 1000 10.2 48.6 47 4 US-08-869-380-7 Sequence 7, Appl

## ALIGNMENTS

RESULT 1  
 US-09 166 448 19  
 : Sequence 19, Application US/09/166448  
 : Patent No. 6,291,430  
 : GENERAL INFORMATION:  
 : APPLICANT: Chaux, Pascal  
 : APPLICANT: Vantomme, Valerie  
 : APPLICANT: Stroobant, Vincent  
 : APPLICANT: Boon-Fallieur, Thierry  
 : APPLICANT: van der Bruggen, Pierre  
 : APPLICANT: Thielemans, Kris  
 : APPLICANT: Cortbals, Jurgen  
 : TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
 : FILE REFERENCE: 10461/7052  
 : CURRENT APPLICATION NUMBER: US/09/166,448  
 : CURRENT FILING DATE: 1998 10-05  
 : NUMBER OF SEQ ID NOS: 81  
 : SOFTWARE: FastSeq for Windows Version 3.0  
 : SEQ ID NO 19  
 : LENGTH: 20  
 : TYPE: DNA  
 : ORGANISM: Homo sapiens  
 US-09 166 448 19

Query Match 70.5% Score 14.8; DB 4; Length 20;  
 Best Local Similarity 88.9%; Prod. No. 3,96002;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 3 CCAATGGAGGCGGCGG 20  
 11111111111111111111  
 1b 3 CCAATGGAGGCGGCGG 20

RESULT 2  
 US-09 697 884 19  
 : Sequence 19, Application US/09/97884  
 : Patent No. 6,426,217  
 : GENERAL INFORMATION:  
 : APPLICANT: Chaux, Pascal  
 : APPLICANT: Vantomme, Valerie  
 : APPLICANT: Stroobant, Vincent  
 : APPLICANT: Boon-Fallieur, Thierry  
 : APPLICANT: van der Bruggen, Pierre  
 : APPLICANT: Thielemans, Kris

: APPLICANT: Cortbals, Jurgen  
 : TITLE OF INVENTION: MAGE-3 PEPTIDES PRESENTED BY HLA CLASS II MOLECULES  
 : FILE REFERENCE: 10461/7052  
 : CURRENT APPLICATION NUMBER: US/09/097,884  
 : CURRENT FILING DATE: 2000 10-27  
 : PRIOR APPLICATION NUMBER: 09/166,448  
 : PRIOR FILING DATE: 1998 10-05  
 : NUMBER OF SEQ ID NOS: 81  
 : SOFTWARE: FastSeq for Windows Version 3.0  
 : SEQ ID NO 19  
 : LENGTH: 20  
 : TYPE: DNA  
 : ORGANISM: Homo sapiens  
 US-09 697 884 19

Query Match 70.5% Score 14.8; DB 4; Length 20;  
 Best Local Similarity 88.9%; Prod. No. 3,96002;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 3 CCAATGGAGGCGGCGG 20  
 11111111111111111111  
 1b 3 CCAATGGAGGCGGCGG 20

RESULT 3  
 US-08 171 409 269/4  
 : Sequence 269, Application US/08/171489  
 : Patent No. 6,760,414  
 : GENERAL INFORMATION:  
 : APPLICANT: Edwards, Cynthia A.  
 : APPLICANT: Cantor, Charles R.  
 : APPLICANT: Andrews, Beth M.  
 : APPLICANT: Burke, Lisa M.  
 : APPLICANT: Figg, Kirk E.  
 : TITLE OF INVENTION: Sequence Directed DNA Binding  
 : TITLE OF INVENTION: Polynucleotides, Compositions and Methods  
 : NUMBER OF SEQUENCES: 641  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: Genetabs Technologies, Inc.  
 : STREET: 605 Brimwood Drive  
 : CITY: Redwood City  
 : STATE: CA  
 : COUNTRY: USA  
 : ZIP: 94063  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC DOS/MS DOS  
 : SOFTWARE: Patent to Release #1.0, Version #1.25  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/171,489  
 : FILING DATE:  
 : CLASSIFICATION: 3,00  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/124,946  
 : FILING DATE: 17 SEP 1993  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 07/996,783  
 : FILING DATE: 25 JAN 1992  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 07/124,618  
 : FILING DATE: 27 JUN 1991  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/081,070  
 : FILING DATE: 22 JUN 1993  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: Fabian, Gary R.  
 : REGISTRATION NUMBER: 33,875  
 : REFERENCE/INVENT NUMBER: 4400 0175/0194  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: (415) 424-0880  
 : TELEFAX: (415) 424-0960  
 : INFORMATION FOR SEQ ID NO: 269;

```

: SEQUENCE CHARACTERISTICS:
: LENGTH: 46 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)
: HYPOTHEICAL: NO
: ORIGINAL SOURCE:
: INDIVIDUAL ISOLATE: Human gene PRB3L for proline rich
: INDIVIDUAL ISOLATE: protein G1
US 08 171-889-269

Query Match
Best Local Similarity 84.28; Score 14.2; DB 1; Length 46;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAACTATGAGAGCGCGCTT 19
DB 4 GAACTATGAGAGCGCGCTT 25

RESULT 4
US-08 171-889-269/1
: Sequence 269, Application US/08123936
: Patent No. 5726014
: GENERAL INFORMATION:
: APPLICANT: Edwards, Cynthia A.
: APPLICANT: Cantor, Charles R.
: APPLICANT: Andrews, Beth M.
: APPLICANT: Turin, Lisa M.
: TITLE OF INVENTION: Screening Assay for the Detection of
: TITLE OF INVENTION: DNA-Binding Molecules
: NUMBER OF SEQUENCES: 640
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Genelabs Technologies, Inc.
: STREET: 505 Penobscot Drive
: CITY: Redwood City
: STATE: CA
: COUNTRY: USA
: ZIP: 94063
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/123,936
: FILING DATE:
: CLASSIFICATION: 445
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/996,783
: FILING DATE: 23-DEC-1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/723,618
: FILING DATE: 27-JUN-1991
: ATTORNEY/AGENT INFORMATION:
: NAME: Fabian, Gary R.
: REGISTRATION NUMBER: 33,875
: REFERENCE/DOCKET NUMBER: 4600-0075, 42/G19P2
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 324-0880
: TELEFAX: (415) 324-0960
: INFORMATION FOR SEQ ID NO: 269:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 46 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)
: HYPOTHEICAL: NO
: ORIGINAL SOURCE:
: INDIVIDUAL ISOLATE: Human gene PRB3L for proline-rich
: INDIVIDUAL ISOLATE: protein G1

```

```

US 08 123-936-269

Query Match
Best Local Similarity 84.28; Score 14.2; DB 1; Length 46;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAACTATGAGAGCGCGCTT 19
DB 4 GAACTATGAGAGCGCGCTT 25

RESULT 5
US-08 475-228A-269/1
: Sequence 269, Application US/08475228A
: Patent No. 5869241
: GENERAL INFORMATION:
: APPLICANT: Edwards, Cynthia A.
: APPLICANT: Cantor, Charles R.
: APPLICANT: Andrews, Beth M.
: APPLICANT: Turin, Lisa M.
: APPLICANT: Fiv, Kirk E.
: TITLE OF INVENTION: Sequence-Directed DNA Binding
: TITLE OF INVENTION: Molecules, Compositions and Methods
: NUMBER OF SEQUENCES: 664
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Genelabs Technologies, Inc.
: STREET: 505 Penobscot Drive
: CITY: Redwood City
: STATE: CA
: COUNTRY: USA
: ZIP: 94063
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/475,228A
: FILING DATE: 06-JUN-1995
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/123,936
: FILING DATE: 17-SEP-1993
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/996,783
: FILING DATE: 23-DEC-1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/723,618
: FILING DATE: 27-JUN-1991
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/081,070
: FILING DATE: 22-JUN-1993
: ATTORNEY/AGENT INFORMATION:
: NAME: Stratford, Carol A.
: REGISTRATION NUMBER: 34,444
: REFERENCE/DOCKET NUMBER: 4600-0175, 21/G19P402
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 324-0880
: TELEFAX: (415) 324-0960
: INFORMATION FOR SEQ ID NO: 269:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 46 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)
: HYPOTHEICAL: NO
: ORIGINAL SOURCE:
: INDIVIDUAL ISOLATE: Human gene PRB3L for proline rich
: INDIVIDUAL ISOLATE: protein G1
US-08 475-228A-269

Query Match
Best Local Similarity 84.28; Score 14.2; DB 2; Length 46;

```





Query Match: 65.7%; Score 14.8; DB 4; Length 40;  
 Best Local Similarity: 88.2%; Pred. No. 1000;  
 Matches: 15; Conservative: 0; Mismatches: 2; Indels: 0; Gaps: 0;

QY 2 ACCTAGGAGAGGAG 18  
 DB 5 ACCTAGGAGGAG 21

## RESULT 11

US 08 600 999 R  
 : Sequence B, Application US/08600999  
 : Patent No. 5925565  
 : GENERAL INFORMATION:  
 : APPLICANT: BERLIOZ, Clarisse  
 : APPLICANT: JACQUEMONT, Sandrine  
 : APPLICANT: TORRENT, Christophe  
 : APPLICANT: DARLIX, Jean-Luc  
 : TITLE OF INVENTION: NEW INTERNAL RIBOSOME ENTRY SITE, VECTOR  
 : TITLE OF INVENTION: CONTAINING IT AND THERAPEUTIC USE  
 : NUMBER OF SEQUENCES: 16  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: BURNS, DEANE, SWICKER & MATHIS  
 : STREET: P.O. Box 1404  
 : CITY: Alexandria  
 : STATE: Virginia  
 : COUNTRY: United States  
 : ZIP: 22304 1404  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: Patent In Release #1.0, Version #1.40  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/600,999  
 : FILING DATE: 05-MAR-1996  
 : CLASSIFICATION: 514  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: FR 94 08400  
 : FILING DATE: 05-JUL-1994  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: WO 94/18954  
 : FILING DATE: 05-JUL-1995  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: Rev. Teresa Stanek  
 : REGISTRATION NUMBER: 40,427  
 : REFERENCE/DOCUMENT NUMBER: 017754-072  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: (703) 846-6620  
 : TELEFAX: (703) 846-2021  
 : INFORMATION FOR SEQ ID NO: 8:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 40 base pairs  
 : TYPE: nucleic acid  
 : STRANDEDNESS: single  
 : TOPOLOGY: linear  
 : MOLECULE TYPE: DNA (synthetic)  
 : HYDROLYTIC: NO  
 : ANTI SENSE: YES  
 : ORIGINAL SOURCE:  
 : STRAIN: rat V140 clemont  
 : INDIVIDUAL ISOLATE: c1140 14  
 : US 08 600 999 R

Query Match: 65.7%; Score 14.8; DB 2; Length 40;  
 Best Local Similarity: 88.2%; Pred. No. 1000;  
 Matches: 15; Conservative: 0; Mismatches: 2; Indels: 0; Gaps: 0;

QY 1 GAGGAGGAGGAGG 17  
 DB 7 GAGGAGGAGGAGG 24

RESULT 12  
 US 09 257 583 26/c  
 : Sequence 29, Application US/09257583A  
 : Patent No. 6429662  
 : GENERAL INFORMATION:  
 : APPLICANT: Chane, Virginia  
 : TITLE OF INVENTION: Family of Maize PR 1 Genes And Promoters  
 : FILE REFERENCE: 5/10 62, 00/18/175219  
 : CURRENT APPLICATION NUMBER: US/09/257,583A  
 : NUMBER OF SEQ ID NOS: 47  
 : SOFTWARE: Patent In Ver. 2.0  
 : SEQ ID No 26  
 : LENGTH: 40  
 : TYPE: DNA  
 : ORGANISM: Artificial Sequence  
 : FEATURE:  
 : OTHER INFORMATION: Description of Artificial Sequence: Maize  
 : US-09-257-583-26

Query Match: 65.7%; Score 14.8; DB 4; Length 40;  
 Best Local Similarity: 88.2%; Pred. No. 1000;  
 Matches: 15; Conservative: 0; Mismatches: 2; Indels: 0; Gaps: 0;

QY 4 CCAATGAGGAGGAG 20  
 DB 17 CCAATGAGGAGGAG 1

## RESULT 13

US 09 257 580 5/c  
 : Sequence 5, Application US/09257580  
 : Patent No. 6407046  
 : GENERAL INFORMATION:  
 : APPLICANT: Yorkshire Cancer Research,  
 : TITLE OF INVENTION: Tumour Suppressor Gene  
 : FILE REFERENCE: Canine p54  
 : CURRENT APPLICATION NUMBER: US/09/257,580  
 : CURRENT FILING DATE: 1999-02-25  
 : PRIOR APPLICATION NUMBER: 9804178.4  
 : PRIOR FILING DATE: 1998-02-28  
 : NUMBER OF SEQ ID NOS: 11  
 : SOFTWARE: Patent In Ver. 2.1  
 : SEQ ID No 5  
 : LENGTH: 44  
 : TYPE: DNA  
 : ORGANISM: Canis  
 : US 09 257 580 5

Query Match: 65.7%; Score 14.6; DB 4; Length 44;  
 Best Local Similarity: 90.0%; Pred. No. 1000;  
 Matches: 12; Conservative: 4; Mismatches: 0; Indels: 0; Gaps: 0;

QY 4 CCAATGAGGAGGAG 18  
 DB 22 CCAATGAGGAGGAG 8

## RESULT 14

US 09 064 411A 17  
 : Sequence 17, Application US/09064411A  
 : Patent No. 6441664  
 : GENERAL INFORMATION:  
 : APPLICANT: Rafan Wilson, Beth  
 : APPLICANT: Geo, Limited  
 : APPLICANT: Skelton  
 : APPLICANT: Young, Scott  
 : APPLICANT: Polkett, Otto  
 : APPLICANT: Armstrong, Katherine  
 : APPLICANT: Cowie, Neil M.  
 : TITLE OF INVENTION: Nucleotide Sequences of Maize cDNA

```

1  TITLE OF INVENTION: Thioesterase and Palmitoyl ACP Thioesterase Genes and
2  TITLE OF INVENTION: Their Use In The Regulation of Fatty Acid Content of Oil
3  NUMBER OF SEQUENCES: 49
4  CORRESPONDENCE ADDRESS:
5  ADDRESSEE: Dow Agrosciences Patent Department
6  STREET: 9440 Zionsville Road
7  CITY: Indianapolis
8  STATE: Indiana
9  COUNTRY: USA
10 ZIP: 46268
11 COMPUTER READABLE FORM:
12 MEDIUM TYPE: Floppy disk
13 OPERATING SYSTEM: IBM PC compatible
14 SOFTWARE: PC-DOS/MS-DOS
15 CURRENT APPLICATION DATA:
16 APPLICATION NUMBER: US/09/064,411A
17 FILING DATE: 22-APR-1998
18 CLASSIFICATION: 800
19 PRIOR APPLICATION DATA:
20 APPLICATION NUMBER: US 60/045,827
21 FILING DATE: 05-MAY-1997
22 ATTORNEY/AGENT INFORMATION:
23 NAME: Borucki, Andrea F.
24 REGISTRATION NUMBER: 44651
25 REFERENCE/DOCKET NUMBER: 50433
26 TELECOMMUNICATION INFORMATION:
27 TELEPHONE: 317-337-4846
28 TELEFAX: 317-337-4847
29 INFORMATION FOR SEQ ID NO: 17:
30 SEQUENCE CHARACTERISTICS:
31 LENGTH: 43 base pairs
32 TYPE: nucleic acid
33 STRANDEDNESS: Single
34 TOPOLOGY: Linear
35 MOLECULE TYPE: DNA
36 US-09-064-411A-17

```

```

Query Match 64.8% Score 13.6; DB 4; Length 44;
Best Local Similarity 80.0% Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 AACATGGGAGGCGGCGGCGG 21
1 | | | | | | | | | | | | | | | | | | | | |
Db 22 AACATGGGAGGCGGCGGCGG 41

RESULT 15
US-09-064-411A-24
Sequence 24, Application US/09/064411A
Patent No. 6331664
GENERAL INFORMATION:
APPLICANT: Robt D. Wilson, Beth
APPLICANT: Guo, Liming
APPLICANT: Skokut, Tom
APPLICANT: Young, Scott
APPLICANT: Folkerts, Otto
APPLICANT: Armstrong, Katherine
APPLICANT: Cowen, Neil M.
TITLE OF INVENTION: Nucleotide Sequences of Maize Oleoyl ACP
TITLE OF INVENTION: Thioesterase and Palmitoyl-ACP Thioesterase Genes and
TITLE OF INVENTION: Their Use In The Regulation of Fatty Acid Content of Oil
NUMBER OF SEQUENCES: 49
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dow Agrosciences Patent Department
STREET: 9440 Zionsville Road
CITY: Indianapolis
STATE: Indiana
COUNTRY: USA
ZIP: 46268
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible

```

```

1  OPERATING SYSTEM: PC-DOS/MS-DOS
2  SOFTWARE: Patent In Release #1.0, Version #1.30
3  CURRENT APPLICATION DATA:
4  APPLICATION NUMBER: US/09/064,411A
5  FILING DATE: 22-APR-1998
6  CLASSIFICATION: 800
7  PRIOR APPLICATION DATA:
8  APPLICATION NUMBER: US 60/045,827
9  FILING DATE: 05-MAY-1997
10 ATTORNEY/AGENT INFORMATION:
11 NAME: Borucki, Andrea F.
12 REGISTRATION NUMBER: 44651
13 REFERENCE/DOCKET NUMBER: 50433
14 TELECOMMUNICATION INFORMATION:
15 TELEPHONE: 317-337-4846
16 TELEFAX: 317-337-4847
17 INFORMATION FOR SEQ ID NO: 24:
18 SEQUENCE CHARACTERISTICS:
19 LENGTH: 19 base pairs
20 TYPE: nucleic acid
21 STRANDEDNESS: Single
22 TOPOLOGY: Linear
23 MOLECULE TYPE: DNA
24 US-09-064-411A-24

Query Match 62.9% Score 13.2; DB 4; Length 19;
Best Local Similarity 83.5% Pred. No. 1.9e+03;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 CAAATGGGAGGCGGCGG 21
1 | | | | | | | | | | | | | | | | |
Db 1 CAAATGGGAGGCGGCGG 18

RESULT 16
US-08-735-609-7/c
Sequence 7, Application US/08/45609
Patent No. 5955360
GENERAL INFORMATION:
APPLICANT: Chamberlain, Jeffrey S.
APPLICANT: Amalfitano, Andrea
APPLICANT: Hauser, Michael A.
APPLICANT: Kumar-Singh, Rajendra
APPLICANT: Hartigan O'Connor, Dennis J.
TITLE OF INVENTION: IMPROVED ADENOVIRUS VECTORS
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Medien & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/735,609
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Indolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: 02484
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 205-8410
TELEFAX: (415) 397-8448
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 27 base pairs
TYPE: nucleic acid

```







```

Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1 GAGGAGAGAGAGAGAG 18
    1 1111111111111111
Hb 24 GAGGAGAGAGAGAGAG 6
    1 1111111111111111

RESULT 22
US 09-064 411A 14
: Sequence 14, Application US/09064411A
: Patent No. 6,630,664
: GENERAL INFORMATION:
: APPLICANT: Rubin-Wilson, Beth
: APPLICANT: Guo, Lintong
: APPLICANT: Skokut, Tom
: APPLICANT: Young, Scott
: APPLICANT: Folkerts, Otto
: APPLICANT: Armstrong, Katherine
: APPLICANT: Cowen, Neil M.
: TITLE OF INVENTION: Nucleoside Sequences of Matze oleoyl-ACP
: TITLE OF INVENTION: Thioesterase and Palmitoyl-ACP thioesterase Genes and
: TITLE OF INVENTION: Their Use in The Regulation of Fatty Acid Content of oil
: NUMBER OF SEQUENCES: 49
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Dow AgroSciences Patent Department
: STREET: 9440 Zionsville Road
: CITY: Indianapolis
: STATE: Indiana
: COUNTRY: USA
: ZIP: 46268
: COMPUTER REAMABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.40
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/064,411A
: FILING DATE: 22-APR-1998
: CLASSIFICATION: 800
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 60/045,827
: FILING DATE: 05-MAY-1997
: ATTORNEY/AGENT INFORMATION:
: NAME: Borucki, Andrea L.
: REGISTRATION NUMBER: 43651
: REFERENCE/BOOKET NUMBER: 50433
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 417-347-4846
: TELEFAX: 417-347-4847
: INFORMATION FOR SEQ ID NO: 14:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 39 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: DNA
US 09-064 411A 14

Query Match 62.98%; Score 13.2; ID# 4; Length 49;
Best Local Similarity 84.48%; Pred. No. 1,90-0.0;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 4 CAAAGGAGAGAGAGAG 21
    1111111111111111
Hb 20 CAAAGGAGAGAGAGAG 47

RESULT 24
US 09 422 073 4/0
: Sequence 4, Application US/09422073
: Patent No. 6,256,606
: GENERAL INFORMATION:
: APPLICANT: Barr, Philip

```

```

: APPLICANT: Sant, Daniel
: APPLICANT: Ashley, Gary
: APPLICANT: Ziermann, Robert
: TITLE OF INVENTION: PRODUCTION OF POLYKETIDES IN BACTERIA
: TITLE OF INVENTION: AND YEAST
: FILE REFERENCE: 40062 20016.01
: CURRENT APPLICATION NUMBER: US/09/422,073
: CURRENT FILING DATE: 1999 10 21
: PRIOR APPLICATION NUMBER: US 60/044,193
: PRIOR FILING DATE: 1996 12 18
: NUMBER OF SEQ ID NOS: 7
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 4
: LENGTH: 42
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURES:
: OTHER INFORMATION: Primer
US-09-422-073-4

Query Match 62.98%; Score 13.2; ID# 4; Length 42;
Best Local Similarity 84.48%; Pred. No. 1,90-0.0;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 4 CAAAGGAGAGAGAGAG 21
    1111111111111111
Hb 40 CAAAGGAGAGAGAGAG 24

RESULT 24
US 08 594 452 82/0
: Sequence 82, Application US/08594452
: Patent No. 6,016,649
: GENERAL INFORMATION:
: APPLICANT: PEYMAN, Amschitzman
: APPLICANT: HELMANN, Ezech
: TITLE OF INVENTION: GAP STABILIZED OLIGO-NUCLEOTIDES
: NUMBER OF SEQUENCES: 105
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Peley & Lardner
: STREET: 8000 K Street, N.W., Suite 500
: CITY: Washington
: STATE: D.C.
: COUNTRY: USA
: ZIP: 20007 5109
: COMPUTER REAMABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC DOS/MS-DOS
: SOFTWARE: Patent In Release #1.0, Version #1.40
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/594,452
: FILING DATE: 31-JAN-1996
: CLASSIFICATION: 536
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: DE 195 02 912.7
: FILING DATE: 31-JAN-1995
: ATTORNEY/AGENT INFORMATION:
: NAME: SANDERSON, Colin G.
: REGISTRATION NUMBER: 51,298
: REFERENCE/BOOKET NUMBER: 1748/204/BOWE
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (202) 672 5300
: TELEFAX: (202) 672 5499
: TELETYPE: 904186
: INFORMATION FOR SEQ ID NO: 82:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 17 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
US 08 594 452 82

```

Query Match 61.98; Score 14; DB 4; Length 17;  
 Best Local Similarity 100.08; Pred. No. 2.3e-04;  
 Matches 13; conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 CAAAGGAGGCG 16  
 DB 13 CAAAGGAGGCG 1

## RESULT 25

US-09-258,408-82/C

; Sequence #2; Application US/09258408  
 ; Patent No. 6121434

## GENERAL INFORMATION:

; APPLICANT: PEYMAN, Anuschirwan

; APPLICANT: UHLMANN, Eugen

; TITLE OF INVENTION: GAP-STABILIZED OLIGONUCLEOTIDES

; NUMBER OF SEQUENCES: 105

## CORRESPONDENCE ADDRESS:

; ADDRESSEE: Foley & Lardner

; STREET: 4000 K Street, N.W., Suite 500

; CITY: Washington

; STATE: D.C.

; COUNTRY: USA

; ZIP: 20007-5104

## COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent Release #1.0, Version #1.00

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/258,408

; FILING DATE:

## CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/594,452

; FILING DATE:

## ATTORNEY/AGENT INFORMATION:

; NAME: SANDERCOCK, Colin G.

; REGISTRATION NUMBER: 41,298

; REFERENCE/DOCKET NUMBER: 18748/264/H0CE

## TELECOMMUNICATION INFORMATION:

; TELEPHONE: (202)672-5300

; TELEFAX: (202)672-5499

; TELEX: 904136

; INFORMATION FOR SEQ ID NO: 82:

## SEQUENCE CHARACTERISTICS:

; LENGTH: 17 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

US-09-258,408-82

Query Match 61.98; Score 14; DB 4; Length 17;  
 Best Local Similarity 100.08; Pred. No. 2.3e-04;  
 Matches 13; conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 CAAAGGAGGCG 16  
 DB 13 CAAAGGAGGCG 1

Search completed: March 18, 2004, 12:09:05  
 Job time : 33.6066 Secs



Genome version 5.1.4.p5.4578  
Copyright (c) 1993 - 2003 Compuen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 18, 2003, 11:26:36 : Search time 34.7705 Seconds  
(without alignments)  
423,899 Million cell updates/sec

Title: us-09-900-115-2

Porter score: 21

Sequence: 1 qacvacatgagccccccteq 21

Scoring tables: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 501302 seqs, 350942545 residues

Total number of hits satisfying chosen parameters: 282480

Minimum DB seq length: 0

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : Published\_Applications\_NA:\*

- 1: /can2\_6/ptodata/2/pubpna/us07\_PUBCOMB.seq:\*
- 2: /can2\_6/ptodata/2/pubpna/us01\_NEW\_PUB.seq:\*
- 3: /can2\_6/ptodata/2/pubpna/us06\_NEW\_PUB.seq:\*
- 4: /can2\_6/ptodata/2/pubpna/us06\_PUBCOMB.seq:\*
- 5: /can2\_6/ptodata/2/pubpna/us07\_NEW\_PUB.seq:\*
- 6: /can2\_6/ptodata/2/pubpna/us08\_PUBCOMB.seq:\*
- 7: /can2\_6/ptodata/2/pubpna/us08\_NEW\_PUB.seq:\*
- 8: /can2\_6/ptodata/2/pubpna/us08\_PUBCOMB.seq:\*
- 9: /can2\_6/ptodata/2/pubpna/us09\_NEW\_PUB.seq:\*
- 10: /can2\_6/ptodata/2/pubpna/us09\_PUBCOMB.seq:\*
- 11: /can2\_6/ptodata/2/pubpna/us10\_NEW\_PUB.seq:\*
- 12: /can2\_6/ptodata/2/pubpna/us10\_PUBCOMB.seq:\*
- 13: /can2\_6/ptodata/2/pubpna/us60\_NEW\_PUB.seq:\*
- 14: /can2\_6/ptodata/2/pubpna/us60\_PUBCOMB.seq:\*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description                          |
|------------|-------|-------------|--------|----|--------------------------------------|
| c 1        | 13.4  | 65.7        | 23     | 10 | US-09-940-479-45 Sequence 45, Appl   |
| c 2        | 13.4  | 65.7        | 30     | 10 | US-09-940-479-26 Sequence 26, Appl   |
| c 3        | 13.4  | 63.8        | 21     | 9  | US-09-992-598-428 Sequence 428, App  |
| c 4        | 13.4  | 63.8        | 21     | 9  | US-09-989-294A-428 Sequence 428, App |
| c 5        | 13.4  | 63.8        | 21     | 9  | US-09-989-745-428 Sequence 428, App  |
| c 6        | 13.4  | 63.8        | 21     | 9  | US-09-940-444-428 Sequence 428, App  |
| c 7        | 13.4  | 63.8        | 21     | 9  | US-09-989-740-428 Sequence 428, App  |
| c 8        | 13.4  | 63.8        | 21     | 9  | US-09-990-446-428 Sequence 428, App  |
| c 9        | 13.4  | 63.8        | 21     | 9  | US-09-991-161-428 Sequence 428, App  |
| c 10       | 13.4  | 63.8        | 21     | 9  | US-09-993-687-428 Sequence 428, App  |
| c 11       | 13.4  | 63.8        | 21     | 9  | US-09-989-744-428 Sequence 428, App  |
| c 12       | 13.4  | 63.8        | 21     | 9  | US-09-997-653-428 Sequence 428, App  |
| c 13       | 13.4  | 63.8        | 21     | 9  | US-09-993-667-428 Sequence 428, App  |
| c 14       | 13.4  | 63.8        | 21     | 9  | US-09-990-438-428 Sequence 428, App  |
| c 15       | 13.4  | 63.8        | 21     | 9  | US-09-990-562-428 Sequence 428, App  |
| c 16       | 13.4  | 63.8        | 21     | 9  | US-09-997-428-428 Sequence 428, App  |
| c 17       | 13.4  | 63.8        | 21     | 9  | US-09-997-666-428 Sequence 428, App  |
| c 18       | 13.4  | 63.8        | 21     | 9  | US-09-990-711-428 Sequence 428, App  |
| c 19       | 13.4  | 63.8        | 21     | 9  | US-09-989-725-428 Sequence 428, App  |

|      |      |      |    |    |   |
|------|------|------|----|----|---|
| 20   | 13.4 | 63.8 | 21 | 9  | US-09-990-437-428 Sequence 428, App     |
| 21   | 13.4 | 63.8 | 21 | 9  | US-09-989-156-428 Sequence 428, App     |
| 22   | 13.4 | 63.8 | 21 | 10 | US-09-989-722-428 Sequence 428, App     |
| 23   | 13.4 | 63.8 | 21 | 10 | US-09-989-723-428 Sequence 428, App     |
| 24   | 13.4 | 63.8 | 21 | 10 | US-09-989-279-428 Sequence 428, App     |
| 25   | 13.4 | 63.8 | 21 | 10 | US-09-989-727-428 Sequence 428, App     |
| 26   | 13.4 | 63.8 | 21 | 10 | US-09-989-741-428 Sequence 428, App     |
| 27   | 13.4 | 63.8 | 21 | 10 | US-09-989-732-428 Sequence 428, App     |
| 28   | 13.4 | 63.8 | 21 | 10 | US-09-991-074-428 Sequence 428, App     |
| 29   | 13.4 | 63.8 | 21 | 10 | US-09-990-442-428 Sequence 428, App     |
| 30   | 13.4 | 63.8 | 21 | 10 | US-09-991-163-428 Sequence 428, App     |
| 31   | 13.4 | 63.8 | 21 | 10 | US-09-993-604-428 Sequence 428, App     |
| 32   | 13.4 | 63.8 | 21 | 10 | US-09-990-456-428 Sequence 428, App     |
| 33   | 13.4 | 63.8 | 21 | 10 | US-09-989-721-428 Sequence 428, App     |
| 34   | 13.4 | 63.8 | 22 | 10 | US-09-915-593-10 Sequence 10, Appl      |
| c 35 | 13.4 | 63.8 | 31 | 9  | US-09-912-263-261 Sequence 41, Appl     |
| c 36 | 13.2 | 62.9 | 42 | 10 | US-09-851-650-4 Sequence 42, Appl       |
| c 37 | 13.1 | 61.9 | 17 | 10 | US-09-860-784-82 Sequence 82, Appl      |
| c 38 | 13.1 | 61.9 | 21 | 10 | US-09-860-784-83 Sequence 83, Appl      |
| c 39 | 12.8 | 61.0 | 17 | 9  | US-10-060-756A-246 Sequence 246, Appl   |
| c 40 | 12.8 | 61.0 | 17 | 9  | US-10-060-756A-237 Sequence 237, Appl   |
| c 41 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-233 Sequence 233, Appl   |
| c 42 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-234 Sequence 234, Appl   |
| c 43 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2235 Sequence 2235, Appl |
| c 44 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2236 Sequence 2236, Appl |
| c 45 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2237 Sequence 2237, Appl |
| c 46 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2238 Sequence 2238, Appl |
| c 47 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2239 Sequence 2239, Appl |
| c 48 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2240 Sequence 2240, Appl |
| c 49 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2241 Sequence 2241, Appl |
| c 50 | 12.8 | 61.0 | 25 | 9  | US-10-060-756A-2242 Sequence 2242, Appl |
| c 51 | 12.6 | 60.0 | 21 | 10 | US-09-765-081-8 Sequence 8, Appl        |
| c 52 | 12.6 | 60.0 | 21 | 10 | US-09-962-318-5 Sequence 5, Appl        |
| c 53 | 12.6 | 60.0 | 21 | 10 | US-09-962-318-7 Sequence 7, Appl        |
| c 54 | 12.4 | 59.0 | 25 | 9  | US-09-731-103-9 Sequence 9, Appl        |
| c 55 | 12.4 | 59.0 | 25 | 12 | US-10-092-929-9 Sequence 9, Appl        |
| c 56 | 12.4 | 59.0 | 31 | 10 | US-09-801-274-1010 Sequence 1010, Appl  |
| c 57 | 12.4 | 59.0 | 31 | 10 | US-09-801-274-1254 Sequence 1254, Appl  |
| c 58 | 12.2 | 58.1 | 30 | 9  | US-09-953-052-8 Sequence 8, Appl        |
| c 59 | 12.2 | 58.1 | 31 | 10 | US-09-801-274-410 Sequence 410, Appl    |
| c 60 | 12.2 | 58.1 | 35 | 12 | US-10-109-886-1 Sequence 1, Appl        |
| c 61 | 12.2 | 58.1 | 47 | 9  | US-09-854-526-205 Sequence 205, Appl    |
| c 62 | 12.2 | 58.1 | 47 | 10 | US-09-901-484A-205 Sequence 46, Appl    |
| c 63 | 12   | 57.1 | 26 | 10 | US-09-870-956-46 Sequence 46, Appl      |
| c 64 | 12   | 57.1 | 34 | 10 | US-09-320-337-43 Sequence 43, Appl      |
| c 65 | 12   | 57.1 | 34 | 10 | US-09-756-744-1 Sequence 1, Appl        |
| c 66 | 12   | 57.1 | 39 | 10 | US-09-734-600-5 Sequence 5, Appl        |
| c 67 | 11.8 | 56.2 | 17 | 9  | US-09-825-805-824 Sequence 824, Appl    |
| c 68 | 11.8 | 56.2 | 17 | 9  | US-10-060-756A-245 Sequence 245, Appl   |
| c 69 | 11.8 | 56.2 | 17 | 9  | US-10-060-756A-248 Sequence 248, Appl   |
| c 70 | 11.8 | 56.2 | 19 | 9  | US-10-006-009-23 Sequence 23, Appl      |
| c 71 | 11.8 | 56.2 | 25 | 9  | US-10-060-756A-2242 Sequence 2242, Appl |
| c 72 | 11.8 | 56.2 | 25 | 9  | US-10-060-756A-2243 Sequence 2243, Appl |
| c 73 | 11.8 | 56.2 | 28 | 9  | US-09-741-103-7 Sequence 7, Appl        |
| c 74 | 11.8 | 56.2 | 28 | 12 | US-10-092-929-7 Sequence 7, Appl        |
| c 75 | 11.8 | 56.2 | 31 | 9  | US-10-060-841-32 Sequence 32, Appl      |
| c 76 | 11.8 | 56.2 | 31 | 9  | US-09-912-263-337 Sequence 337, Appl    |
| c 77 | 11.8 | 56.2 | 34 | 9  | US-10-060-841-37 Sequence 37, Appl      |
| c 78 | 11.8 | 56.2 | 38 | 9  | US-09-998-425-12 Sequence 12, Appl      |
| c 79 | 11.8 | 56.2 | 38 | 9  | US-09-997-977-12 Sequence 12, Appl      |
| c 80 | 11.8 | 56.2 | 42 | 9  | US-09-925-664-65 Sequence 65, Appl      |
| c 81 | 11.6 | 55.2 | 21 | 10 | US-09-765-081-84 Sequence 84, Appl      |
| c 82 | 11.6 | 55.2 | 29 | 9  | US-09-991-262-21 Sequence 21, Appl      |
| c 83 | 11.6 | 55.2 | 30 | 9  | US-09-821-616-18 Sequence 18, Appl      |
| c 84 | 11.6 | 55.2 | 30 | 10 | US-09-760-139-31 Sequence 31, Appl      |
| c 85 | 11.6 | 55.2 | 34 | 9  | US-09-991-209-75 Sequence 75, Appl      |
| c 86 | 11.6 | 55.2 | 40 | 10 | US-09-827-864-16 Sequence 16, Appl      |
| c 87 | 11.6 | 55.2 | 41 | 10 | US-09-810-846B-13 Sequence 13, Appl     |
| c 88 | 11.6 | 55.2 | 47 | 8  | US-08-973-891A-2 Sequence 2, Appl       |
| c 89 | 11.6 | 55.2 | 49 | 10 | US-09-859-774A-9 Sequence 9, Appl       |
| c 90 | 11.6 | 55.2 | 50 | 9  | US-10-103-002-7 Sequence 7, Appl        |
| c 91 | 11.6 | 55.2 | 50 | 9  | US-09-821-616-23 Sequence 23, Appl      |
| c 92 | 11.6 | 55.2 | 50 | 10 | US-09-909-496-6 Sequence 6, Appl        |















```

c 969 9.6 45.7 46 10 US-09-766-916-25 Sequence 25, Appl
c 970 9.6 45.7 46 10 US-09-904-536 6 Sequence 6, Appl
c 971 9.6 45.7 46 10 US-09-904-536 7 Sequence 7, Appl
c 972 9.6 45.7 48 9 US-09-916-494A-48 Sequence 48, Appl
c 973 9.6 45.7 48 9 US-09-864-785-659 Sequence 3559, Ap
c 974 9.6 45.7 48 9 US-09-465-925 6 Sequence 6, Appl
c 975 9.6 45.7 48 10 US-09-920-171 44 Sequence 44, Appl
c 976 9.6 45.7 50 9 US-10-103-002 11 Sequence 11, Appl
c 977 9.6 45.7 50 9 US-09-765-555 28 Sequence 28, Appl
c 978 9.6 45.7 50 9 US-09-765-555 28 Sequence 28, Appl
c 979 9.6 45.7 50 10 US-09-909-436 8 Sequence 8, Appl
c 980 9.4 44.8 15 9 US-09-825-805-104 Sequence 104, Ap
c 981 9.4 44.8 16 10 US-09-917-138 6 Sequence 6, Appl
c 982 9.4 44.8 17 9 US-09-864-785-462 Sequence 462, Ap
c 983 9.4 44.8 17 9 US-09-864-785-464 Sequence 463, Ap
c 984 9.4 44.8 17 9 US-09-864-785-464 Sequence 464, Ap
c 985 9.4 44.8 17 9 US-09-864-785-465 Sequence 465, Ap
c 986 9.4 44.8 17 9 US-09-864-785-637 Sequence 637, Ap
c 987 9.4 44.8 17 9 US-09-864-785-638 Sequence 638, Ap
c 988 9.4 44.8 17 9 US-09-864-785-1575 Sequence 1575, Ap
c 989 9.4 44.8 17 9 US-09-864-785-1576 Sequence 1576, Ap
c 990 9.4 44.8 17 9 US-09-864-785-1679 Sequence 1680, Ap
c 991 9.4 44.8 17 9 US-09-864-785-1680 Sequence 1680, Ap
c 992 9.4 44.8 17 9 US-09-864-785-2954 Sequence 2954, Ap
c 993 9.4 44.8 17 9 US-09-825-805-464 Sequence 464, Ap
c 994 9.4 44.8 17 9 US-09-825-805-838 Sequence 838, Ap
c 995 9.4 44.8 17 9 US-10-060-756A-231 Sequence 231, Ap
c 996 9.4 44.8 17 9 US-10-060-756A-232 Sequence 232, Ap
c 997 9.4 44.8 17 10 US-09-866-108-2589 Sequence 2589, Ap
c 998 9.4 44.8 17 10 US-09-866-108-2590 Sequence 2590, Ap
c 999 9.4 44.8 17 10 US-09-866-108-2591 Sequence 2591, Ap
c1000 9.4 44.8 17 10 US-09-866-108-2592 Sequence 2592, Ap

```

## ALIGNMENTS

```

RESULT 1
US-09-840-479 45/45
: Sequence 35, Application US/09840479
: Patent No. US20010025480A1
: GENERAL INFORMATION:
: APPLICANT: Crane, Virginia
: TITLE OF INVENTION: Family of Maize PR 1 Genes And Promoters
: FILE REFERENCE: 5/18 42, 045718/175219
: CURRENT APPLICATION NUMBER: US/09/840,479
: CURRENT FILING DATE: 2001 04 24
: PRIOR APPLICATION NUMBER: 09/257,583
: PRIOR FILING DATE: 1999 02 25
: NUMBER OF SEQ ID NOS: 37
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 35
: LENGTH: 23
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Maize
: OTHER INFORMATION: gene specific PCR primer
US-09-840-479-35

```

```

Query Match 65.78; Score 14.8; Db 10; Length 23;
Best Local Similarity 88.28; P-Val. No. 1.5e-04;
Matches 15; Conservative 2; Mismatches 0; Gaps 0;

```

```

QY 5 CATTGGACGCGGCGGCG 21
|||||
Db 23 CATTGGACGCGGCGGCG 7

```

```

RESULT 2
US-09-840-479 26/26
: Sequence 26, Application US/09840479
: Patent No. US20010025480A1

```

```

: GENERAL INFORMATION:
: APPLICANT: Crane, Virginia
: TITLE OF INVENTION: Family of Maize PR 1 Genes And Promoters
: FILE REFERENCE: 5/18 42, 045718/175219
: CURRENT APPLICATION NUMBER: US/09/840,479
: CURRENT FILING DATE: 2001 04 24
: PRIOR APPLICATION NUMBER: 09/257,583
: PRIOR FILING DATE: 1999 02 25
: NUMBER OF SEQ ID NOS: 37
: SOFTWARE: Patent In Ver. 2.0
: SEQ ID NO 26
: LENGTH: 30
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Maize
: OTHER INFORMATION: gene specific PCR primer
US-09-840-479-26

```

```

Query Match 65.78; Score 14.8; Db 10; Length 30;
Best Local Similarity 88.28; P-Val. No. 1.5e-04;
Matches 15; Conservative 0; Mismatches 2; Gaps 0;

```

```

QY 4 CATTGGACGCGGCGGCG 20
|||||
Db 17 CATTGGACGCGGCGGCG 1

```

```

RESULT 3
US-09-992-598-428
: Sequence 428, Application US/09992598
: Patent No. US20020160384A1
: GENERAL INFORMATION:
: APPLICANT: Ashkenazi, Avi J.
: APPLICANT: Baker, Kevin P.
: APPLICANT: Batstein, David
: APPLICANT: Bestenberger, Dan
: APPLICANT: Falcou, Dan E.
: APPLICANT: Ferrara, Raffaele
: APPLICANT: Fong, Shuchun
: APPLICANT: Geller, Hanspeter
: APPLICANT: Gertlisson, Mary E.
: APPLICANT: Gohbari, Andrey
: APPLICANT: Gubowski, Paul J.
: APPLICANT: Grimaldi, Christophe
: APPLICANT: Gurney, Austin L.
: APPLICANT: Kijavitsa, Zoltan
: APPLICANT: Kijavitsa, Zoltan
: APPLICANT: Nopfert, Mary A.
: APPLICANT: Pab, James
: APPLICANT: Panti, Nicholas F.
: APPLICANT: Roy, Margaret Ann
: APPLICANT: Stewart, Timothy A.
: APPLICANT: Thomas, Daniel
: APPLICANT: Watanabe, Colin K.
: APPLICANT: Williams, F. Mickey
: APPLICANT: Wood, William L.
: APPLICANT: Zhang, Zemin
: TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
: TITLE OF INVENTION: Acids Encoding the Same
: FILE REFERENCE: 12/3001020
: CURRENT APPLICATION NUMBER: US/09/992,598
: CURRENT FILING DATE: 2001 11 14
: PRIOR APPLICATION NUMBER: 60/049787
: PRIOR FILING DATE: 1997 06 16
: PRIOR APPLICATION NUMBER: 60/062250
: PRIOR FILING DATE: 1997 10 17
: PRIOR APPLICATION NUMBER: 60/065186
: PRIOR FILING DATE: 1997 11 12
: PRIOR APPLICATION NUMBER: 60/065411
: PRIOR FILING DATE: 1997 11 14
: PRIOR APPLICATION NUMBER: 60/066770
: PRIOR FILING DATE: 1997 11 24
: PRIOR APPLICATION NUMBER: 60/075945

```

[illegible]

1 PRIOR FILING DATE: 1998-07-02  
 2 PRIOR APPLICATION NUMBER: 60/091426  
 3 PRIOR FILING DATE: 1998-07-02  
 4 PRIOR APPLICATION NUMBER: 60/091434  
 5 PRIOR FILING DATE: 1998-07-02  
 6 PRIOR APPLICATION NUMBER: 60/091978  
 7 PRIOR FILING DATE: 1998-07-07  
 8 PRIOR APPLICATION NUMBER: 60/091982  
 9 PRIOR FILING DATE: 1998-07-07  
 10 PRIOR APPLICATION NUMBER: 60/092182  
 11 PRIOR FILING DATE: 1998-07-09

Query Match 63.88; Score 13.4; DB 9; Length 21;

Best Local Similarity 93.4%; Pred. No. 2,4e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 ACCGATGAGTAAAGGCG 16

111111111111111111

1b 4 ACCGATGAGTAAAGGCG 17

#### RESULT 4

US-09-989-293A 428

Sequence 428, Application US/09989293A

Patent No. US2002017716A1

#### GENERAL INFORMATION:

1 APPLICANT: Ashkenazi, Avi J.  
 2 APPLICANT: Baker, Kevin P.  
 3 APPLICANT: Botstein, David  
 4 APPLICANT: Desnuyers, Luc  
 5 APPLICANT: Eaton, Dan L.  
 6 APPLICANT: Ferrara, Napoleone  
 7 APPLICANT: Fong, Sherman  
 8 APPLICANT: Gerber, Hanspeter  
 9 APPLICANT: Gottlieb, Mary E.  
 10 APPLICANT: Goddard, Audrey  
 11 APPLICANT: Godowski, Paul J.  
 12 APPLICANT: Grimaldi, J. Christopher  
 13 APPLICANT: Gurney, Austin L.  
 14 APPLICANT: Kljavin, Ivar J.  
 15 APPLICANT: Napier, Mary A.  
 16 APPLICANT: Pan, James  
 17 APPLICANT: Paoni, Nicholas F.  
 18 APPLICANT: Roy, Margaret Ann  
 19 APPLICANT: Stewart, Timothy A.  
 20 APPLICANT: Tumas, Daniel  
 21 APPLICANT: Watanabe, Colin K.  
 22 APPLICANT: Williams, P. Mickey  
 23 APPLICANT: Wood, William L.  
 24 APPLICANT: Zhang, Zemin  
 25 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 26 TITLE OF INVENTION: Acids Encoding the Same  
 27 FILE REFERENCE: P27401066  
 28 CURRENT APPLICATION NUMBER: US/09/989-293A  
 29 CURRENT FILING DATE: 2001-11-20  
 30 PRIOR APPLICATION NUMBER: 60/049787  
 31 PRIOR FILING DATE: 1997-06-16  
 32 PRIOR APPLICATION NUMBER: 60/062250  
 33 PRIOR FILING DATE: 1997-10-17  
 34 PRIOR APPLICATION NUMBER: 60/065186  
 35 PRIOR FILING DATE: 1997-11-12  
 36 PRIOR APPLICATION NUMBER: 60/065411  
 37 PRIOR FILING DATE: 1997-11-14  
 38 PRIOR APPLICATION NUMBER: 60/066770  
 39 PRIOR FILING DATE: 1997-11-24  
 40 PRIOR APPLICATION NUMBER: 60/075945  
 41 PRIOR FILING DATE: 1998-02-25  
 42 PRIOR APPLICATION NUMBER: 60/078910  
 43 PRIOR FILING DATE: 1998-03-20  
 44 PRIOR APPLICATION NUMBER: 60/084322  
 45 PRIOR FILING DATE: 1998-04-28  
 46 PRIOR APPLICATION NUMBER: 60/084600  
 47 PRIOR FILING DATE: 1998-05-07

1 PRIOR APPLICATION NUMBER: 60/087106  
 2 PRIOR FILING DATE: 1998-05-28  
 3 PRIOR APPLICATION NUMBER: 60/087607  
 4 PRIOR FILING DATE: 1998-06-02  
 5 PRIOR APPLICATION NUMBER: 60/087609  
 6 PRIOR FILING DATE: 1998-06-02  
 7 PRIOR APPLICATION NUMBER: 60/087759  
 8 PRIOR FILING DATE: 1998-06-02  
 9 PRIOR APPLICATION NUMBER: 60/087827  
 10 PRIOR FILING DATE: 1998-06-03  
 11 PRIOR APPLICATION NUMBER: 60/088021  
 12 PRIOR FILING DATE: 1998-06-04  
 13 PRIOR APPLICATION NUMBER: 60/088025  
 14 PRIOR FILING DATE: 1998-06-04  
 15 PRIOR APPLICATION NUMBER: 60/088026  
 16 PRIOR FILING DATE: 1998-06-04  
 17 PRIOR APPLICATION NUMBER: 60/088028  
 18 PRIOR FILING DATE: 1998-06-04  
 19 PRIOR APPLICATION NUMBER: 60/088029  
 20 PRIOR FILING DATE: 1998-06-04  
 21 PRIOR APPLICATION NUMBER: 60/088030  
 22 PRIOR FILING DATE: 1998-06-04  
 23 PRIOR APPLICATION NUMBER: 60/088033  
 24 PRIOR FILING DATE: 1998-06-04  
 25 PRIOR APPLICATION NUMBER: 60/088326  
 26 PRIOR FILING DATE: 1998-06-04  
 27 PRIOR APPLICATION NUMBER: 60/088167  
 28 PRIOR FILING DATE: 1998-06-05  
 29 PRIOR APPLICATION NUMBER: 60/088202  
 30 PRIOR FILING DATE: 1998-06-05  
 31 PRIOR APPLICATION NUMBER: 60/088212  
 32 PRIOR FILING DATE: 1998-06-05  
 33 PRIOR APPLICATION NUMBER: 60/088217  
 34 PRIOR FILING DATE: 1998-06-05  
 35 PRIOR APPLICATION NUMBER: 60/088655  
 36 PRIOR FILING DATE: 1998-06-09  
 37 PRIOR APPLICATION NUMBER: 60/088734  
 38 PRIOR FILING DATE: 1998-06-10  
 39 PRIOR APPLICATION NUMBER: 60/088738  
 40 PRIOR FILING DATE: 1998-06-10  
 41 PRIOR APPLICATION NUMBER: 60/088742  
 42 PRIOR FILING DATE: 1998-06-10  
 43 PRIOR APPLICATION NUMBER: 60/088810  
 44 PRIOR FILING DATE: 1998-06-10  
 45 PRIOR APPLICATION NUMBER: 60/088824  
 46 PRIOR FILING DATE: 1998-06-10  
 47 PRIOR APPLICATION NUMBER: 60/088826  
 48 PRIOR FILING DATE: 1998-06-10  
 49 PRIOR APPLICATION NUMBER: 60/088858  
 50 PRIOR FILING DATE: 1998-06-11  
 51 PRIOR APPLICATION NUMBER: 60/088861  
 52 PRIOR FILING DATE: 1998-06-11  
 53 PRIOR APPLICATION NUMBER: 60/088876  
 54 PRIOR FILING DATE: 1998-06-11  
 55 PRIOR APPLICATION NUMBER: 60/089105  
 56 PRIOR FILING DATE: 1998-06-12  
 57 PRIOR APPLICATION NUMBER: 60/089440  
 58 PRIOR FILING DATE: 1998-06-16  
 59 PRIOR APPLICATION NUMBER: 60/089512  
 60 PRIOR FILING DATE: 1998-06-16  
 61 PRIOR APPLICATION NUMBER: 60/089514  
 62 PRIOR FILING DATE: 1998-06-16  
 63 PRIOR APPLICATION NUMBER: 60/089532  
 64 PRIOR FILING DATE: 1998-06-17  
 65 PRIOR APPLICATION NUMBER: 60/089538  
 66 PRIOR FILING DATE: 1998-06-17  
 67 PRIOR APPLICATION NUMBER: 60/089598  
 68 PRIOR FILING DATE: 1998-06-17  
 69 PRIOR APPLICATION NUMBER: 60/089599  
 70 PRIOR FILING DATE: 1998-06-17  
 71 PRIOR APPLICATION NUMBER: 60/089600  
 72 PRIOR FILING DATE: 1998-06-17  
 73 PRIOR APPLICATION NUMBER: 60/089654

|   |                           |            |
|---|---------------------------|------------|
| 2 | PRIOR FILING DATE:        | 1998-06-17 |
| 2 | PRIOR APPLICATION NUMBER: | 60/089961  |
| 2 | PRIOR FILING DATE:        | 1998-06-18 |
| 2 | PRIOR APPLICATION NUMBER: | 60/089967  |
| 2 | PRIOR FILING DATE:        | 1998-06-18 |
| 2 | PRIOR APPLICATION NUMBER: | 60/089968  |
| 2 | PRIOR FILING DATE:        | 1998-06-18 |
| 2 | PRIOR APPLICATION NUMBER: | 60/089947  |
| 2 | PRIOR FILING DATE:        | 1998-06-19 |
| 2 | PRIOR APPLICATION NUMBER: | 60/089948  |
| 2 | PRIOR FILING DATE:        | 1998-06-19 |
| 2 | PRIOR APPLICATION NUMBER: | 60/089952  |
| 2 | PRIOR FILING DATE:        | 1998-06-19 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090246  |
| 2 | PRIOR FILING DATE:        | 1998-06-22 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090252  |
| 2 | PRIOR FILING DATE:        | 1998-06-22 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090254  |
| 2 | PRIOR FILING DATE:        | 1998-06-22 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090449  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090455  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090456  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090444  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090445  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090472  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090535  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090540  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090542  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090557  |
| 2 | PRIOR FILING DATE:        | 1998-06-24 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090676  |
| 2 | PRIOR FILING DATE:        | 1998-06-25 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090678  |
| 2 | PRIOR FILING DATE:        | 1998-06-25 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090690  |
| 2 | PRIOR FILING DATE:        | 1998-06-25 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090694  |
| 2 | PRIOR FILING DATE:        | 1998-06-25 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090695  |
| 2 | PRIOR FILING DATE:        | 1998-06-25 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090696  |
| 2 | PRIOR FILING DATE:        | 1998-06-25 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090862  |
| 2 | PRIOR FILING DATE:        | 1998-06-26 |
| 2 | PRIOR APPLICATION NUMBER: | 60/090863  |
| 2 | PRIOR FILING DATE:        | 1998-06-26 |
| 2 | PRIOR APPLICATION NUMBER: | 60/091360  |
| 2 | PRIOR FILING DATE:        | 1998-07-01 |
| 2 | PRIOR APPLICATION NUMBER: | 60/091478  |
| 2 | PRIOR FILING DATE:        | 1998-07-02 |
| 2 | PRIOR APPLICATION NUMBER: | 60/091626  |
| 2 | PRIOR FILING DATE:        | 1998-07-02 |
| 2 | PRIOR APPLICATION NUMBER: | 60/091633  |
| 2 | PRIOR FILING DATE:        | 1998-07-02 |
| 2 | PRIOR APPLICATION NUMBER: | 60/091478  |

|                                      |                             |                          |
|--------------------------------------|-----------------------------|--------------------------|
| :                                    | PRIOR APPLICATION NUMBER:   | 60/091982                |
| :                                    | PRIOR FILING DATE:          | 1998-07-07               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/092182                |
| :                                    | PRIOR FILING DATE:          | 1998-07-09               |
| <br>                                 |                             |                          |
| Query Match                          | 93.8%;                      | Score                    |
| Best Local Similarity                | 93.3%;                      | Prod.                    |
| Matches                              | 14;                         | Conservative             |
| <br>                                 |                             |                          |
| QY                                   | 2 ACCAAAGGACGGC 16          |                          |
|                                      |                             |                          |
| D6                                   | 3 ACCAAAGGACGGC 17          |                          |
| <br>                                 |                             |                          |
| RESULT 5                             |                             |                          |
| US 09-989-745-42#                    |                             |                          |
| Sequence 42#, Application US/0908745 |                             |                          |
| Publication No. US2002/03299A1       |                             |                          |
| GENERAL INFORMATION:                 |                             |                          |
| :                                    | APPLICANT:                  | Asikendzi, Avi J.        |
| :                                    | APPLICANT:                  | Baker, Kevin P.          |
| :                                    | APPLICANT:                  | Boettchen, David         |
| :                                    | APPLICANT:                  | Beshoyevs, Luc           |
| :                                    | APPLICANT:                  | Fallon, Dan L.           |
| :                                    | APPLICANT:                  | Ferrara, Napoleone       |
| :                                    | APPLICANT:                  | Frost, Sherman           |
| :                                    | APPLICANT:                  | Gerber, Hanspeter        |
| :                                    | APPLICANT:                  | Gerritsen, Mary E.       |
| :                                    | APPLICANT:                  | Goddard, Audrey          |
| :                                    | APPLICANT:                  | Godowski, Paul J.        |
| :                                    | APPLICANT:                  | Grimaldi, J. Christopher |
| :                                    | APPLICANT:                  | Gurney, Austin L.        |
| :                                    | APPLICANT:                  | Klavin, Ivar J.          |
| :                                    | APPLICANT:                  | Napier, Mary A.          |
| :                                    | APPLICANT:                  | Pan, James               |
| :                                    | APPLICANT:                  | Pecht, Nicholas F.       |
| :                                    | APPLICANT:                  | Rey, Martaret Ann        |
| :                                    | APPLICANT:                  | Stewart, Timothy A.      |
| :                                    | APPLICANT:                  | Tomas, Daniel            |
| :                                    | APPLICANT:                  | Watanabe, Colin K.       |
| :                                    | APPLICANT:                  | Williams, S. Mickey      |
| :                                    | APPLICANT:                  | Wood, William L.         |
| :                                    | APPLICANT:                  | Zhang, Zimin             |
| <br>                                 |                             |                          |
| :                                    | TITLE OF INVENTION:         | Secreted and Traded      |
| :                                    | TITLE OF INVENTION:         | Asids Encoding           |
| :                                    | FILE REFERENCE:             | P240P1261                |
| :                                    | CURRENT APPLICATION NUMBER: | US/09/98                 |
| :                                    | CURRENT FILING DATE:        | 2001-11-19               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/049787                |
| :                                    | PRIOR FILING DATE:          | 1997-06-16               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/062250                |
| :                                    | PRIOR FILING DATE:          | 1997-10-17               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/065186                |
| :                                    | PRIOR FILING DATE:          | 1997-11-12               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/065411                |
| :                                    | PRIOR FILING DATE:          | 1997-11-13               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/066770                |
| :                                    | PRIOR FILING DATE:          | 1997-11-24               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/075945                |
| :                                    | PRIOR FILING DATE:          | 1998-02-25               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/078910                |
| :                                    | PRIOR FILING DATE:          | 1998-03-20               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/084322                |
| :                                    | PRIOR FILING DATE:          | 1998-04-28               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/084600                |
| :                                    | PRIOR FILING DATE:          | 1998-05-07               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/087106                |
| :                                    | PRIOR FILING DATE:          | 1998-05-28               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/087607                |
| :                                    | PRIOR FILING DATE:          | 1998-06-02               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/087609                |
| :                                    | PRIOR FILING DATE:          | 1998-06-02               |
| :                                    | PRIOR APPLICATION NUMBER:   | 60/087759                |

1 PRIOR FILING DATE: 1998-06-02  
2 PRIOR APPLICATION NUMBER: 60/087827  
3 PRIOR FILING DATE: 1998-06-03  
4 PRIOR APPLICATION NUMBER: 60/088021  
5 PRIOR FILING DATE: 1998-06-04  
6 PRIOR APPLICATION NUMBER: 60/088025  
7 PRIOR FILING DATE: 1998-06-04  
8 PRIOR APPLICATION NUMBER: 60/088026  
9 PRIOR FILING DATE: 1998-06-04  
10 PRIOR APPLICATION NUMBER: 60/088028  
11 PRIOR FILING DATE: 1998-06-04  
12 PRIOR APPLICATION NUMBER: 60/088029  
13 PRIOR FILING DATE: 1998-06-04  
14 PRIOR APPLICATION NUMBER: 60/088040  
15 PRIOR FILING DATE: 1998-06-04  
16 PRIOR APPLICATION NUMBER: 60/088043  
17 PRIOR FILING DATE: 1998-06-04  
18 PRIOR APPLICATION NUMBER: 60/088426  
19 PRIOR FILING DATE: 1998-06-04  
20 PRIOR APPLICATION NUMBER: 60/088167  
21 PRIOR FILING DATE: 1998-06-05  
22 PRIOR APPLICATION NUMBER: 60/088202  
23 PRIOR FILING DATE: 1998-06-05  
24 PRIOR APPLICATION NUMBER: 60/088212  
25 PRIOR FILING DATE: 1998-06-05  
26 PRIOR APPLICATION NUMBER: 60/088217  
27 PRIOR FILING DATE: 1998-06-05  
28 PRIOR APPLICATION NUMBER: 60/088055  
29 PRIOR FILING DATE: 1998-06-09  
30 PRIOR APPLICATION NUMBER: 60/088744  
31 PRIOR FILING DATE: 1998-06-10  
32 PRIOR APPLICATION NUMBER: 60/088748  
33 PRIOR FILING DATE: 1998-06-10  
34 PRIOR APPLICATION NUMBER: 60/088742  
35 PRIOR FILING DATE: 1998-06-10  
36 PRIOR APPLICATION NUMBER: 60/088810  
37 PRIOR FILING DATE: 1998-06-10  
38 PRIOR APPLICATION NUMBER: 60/088824  
39 PRIOR FILING DATE: 1998-06-10  
40 PRIOR APPLICATION NUMBER: 60/088876  
41 PRIOR FILING DATE: 1998-06-11  
42 PRIOR APPLICATION NUMBER: 60/0889105  
43 PRIOR FILING DATE: 1998-06-12  
44 PRIOR APPLICATION NUMBER: 60/089440  
45 PRIOR FILING DATE: 1998-06-16  
46 PRIOR APPLICATION NUMBER: 60/089512  
47 PRIOR FILING DATE: 1998-06-16  
48 PRIOR APPLICATION NUMBER: 60/089514  
49 PRIOR FILING DATE: 1998-06-16  
50 PRIOR APPLICATION NUMBER: 60/089542  
51 PRIOR FILING DATE: 1998-06-17  
52 PRIOR APPLICATION NUMBER: 60/089548  
53 PRIOR FILING DATE: 1998-06-17  
54 PRIOR APPLICATION NUMBER: 60/089598  
55 PRIOR FILING DATE: 1998-06-17  
56 PRIOR APPLICATION NUMBER: 60/089599  
57 PRIOR FILING DATE: 1998-06-17  
58 PRIOR APPLICATION NUMBER: 60/089600  
59 PRIOR FILING DATE: 1998-06-17  
60 PRIOR APPLICATION NUMBER: 60/089654  
61 PRIOR FILING DATE: 1998-06-17  
62 PRIOR APPLICATION NUMBER: 60/089801  
63 PRIOR FILING DATE: 1998-06-18  
64 PRIOR APPLICATION NUMBER: 60/089907  
65 PRIOR FILING DATE: 1998-06-18  
66 PRIOR APPLICATION NUMBER: 60/089908  
67 PRIOR FILING DATE: 1998-06-18

1 PRIOR APPLICATION NUMBER: 60/089947  
2 PRIOR FILING DATE: 1998-06-19  
3 PRIOR APPLICATION NUMBER: 60/089948  
4 PRIOR FILING DATE: 1998-06-19  
5 PRIOR APPLICATION NUMBER: 60/089952  
6 PRIOR FILING DATE: 1998-06-19  
7 PRIOR APPLICATION NUMBER: 60/090246  
8 PRIOR FILING DATE: 1998-06-22  
9 PRIOR APPLICATION NUMBER: 60/090252  
10 PRIOR FILING DATE: 1998-06-22  
11 PRIOR APPLICATION NUMBER: 60/090254  
12 PRIOR FILING DATE: 1998-06-22  
13 PRIOR APPLICATION NUMBER: 60/090349  
14 PRIOR FILING DATE: 1998-06-24  
15 PRIOR APPLICATION NUMBER: 60/090355  
16 PRIOR FILING DATE: 1998-06-24  
17 PRIOR APPLICATION NUMBER: 60/090429  
18 PRIOR FILING DATE: 1998-06-24  
19 PRIOR APPLICATION NUMBER: 60/090431  
20 PRIOR FILING DATE: 1998-06-24  
21 PRIOR APPLICATION NUMBER: 60/090435  
22 PRIOR FILING DATE: 1998-06-24  
23 PRIOR APPLICATION NUMBER: 60/090444  
24 PRIOR FILING DATE: 1998-06-24  
25 PRIOR APPLICATION NUMBER: 60/090445  
26 PRIOR FILING DATE: 1998-06-24  
27 PRIOR APPLICATION NUMBER: 60/090472  
28 PRIOR FILING DATE: 1998-06-24  
29 PRIOR APPLICATION NUMBER: 60/090535  
30 PRIOR FILING DATE: 1998-06-24  
31 PRIOR APPLICATION NUMBER: 60/090540  
32 PRIOR FILING DATE: 1998-06-24  
33 PRIOR APPLICATION NUMBER: 60/090542  
34 PRIOR FILING DATE: 1998-06-24  
35 PRIOR APPLICATION NUMBER: 60/090557  
36 PRIOR FILING DATE: 1998-06-24  
37 PRIOR APPLICATION NUMBER: 60/090676  
38 PRIOR FILING DATE: 1998-06-25  
39 PRIOR APPLICATION NUMBER: 60/090678  
40 PRIOR FILING DATE: 1998-06-25  
41 PRIOR APPLICATION NUMBER: 60/090690  
42 PRIOR FILING DATE: 1998-06-25  
43 PRIOR APPLICATION NUMBER: 60/090694  
44 PRIOR FILING DATE: 1998-06-25  
45 PRIOR APPLICATION NUMBER: 60/090695  
46 PRIOR FILING DATE: 1998-06-25  
47 PRIOR APPLICATION NUMBER: 60/090696  
48 PRIOR FILING DATE: 1998-06-25  
49 PRIOR APPLICATION NUMBER: 60/090862  
50 PRIOR FILING DATE: 1998-06-26  
51 PRIOR APPLICATION NUMBER: 60/090863  
52 PRIOR FILING DATE: 1998-06-26  
53 PRIOR APPLICATION NUMBER: 60/091460  
54 PRIOR FILING DATE: 1998-07-01  
55 PRIOR APPLICATION NUMBER: 60/091478  
56 PRIOR FILING DATE: 1998-07-02  
57 PRIOR APPLICATION NUMBER: 60/091544  
58 PRIOR FILING DATE: 1998-07-01  
59 PRIOR APPLICATION NUMBER: 60/091519  
60 PRIOR FILING DATE: 1998-07-02  
61 PRIOR APPLICATION NUMBER: 60/091626  
62 PRIOR FILING DATE: 1998-07-02  
63 PRIOR APPLICATION NUMBER: 60/091634  
64 PRIOR FILING DATE: 1998-07-02  
65 PRIOR APPLICATION NUMBER: 60/091978  
66 PRIOR FILING DATE: 1998-07-07  
67 PRIOR APPLICATION NUMBER: 60/091982  
68 PRIOR FILING DATE: 1998-07-07  
69 PRIOR APPLICATION NUMBER: 60/092182  
70 PRIOR FILING DATE: 1998-07-09



```
Matches 14: Conservative 0: Mismatches 1: Indels 0: Gaps 0:
Qy 2 AATAATGCACATCC 16
    1111111111111111
Db 3 AATAATGCACATCC 17

RESULT 6
US-09-900-115-2 428
: Sequence 428, Application US/09990444
: Publication No. US20020193400A1
: GENERAL INFORMATION:
: APPLICANT: Ashkenazi, Avi J.
: APPLICANT: Baker, Kevin P.
: APPLICANT: Botstein, David
: APPLICANT: Desnovers, Luc
: APPLICANT: Eaton, Dan L.
: APPLICANT: Ferrara, Napoleone
: APPLICANT: Fond, Sherman
: APPLICANT: Gerber, Hanspeter
: APPLICANT: Gottfredson, Mary E.
: APPLICANT: Goddard, Audrey
: APPLICANT: Godowski, Paul J.
: APPLICANT: Grimaldi, J. Christopher
: APPLICANT: Gurney, Austin L.
: APPLICANT: Kijavits, Ivar J.
: APPLICANT: Napier, Mary A.
: APPLICANT: Pan, James
: APPLICANT: Paoni, Nicholas F.
: APPLICANT: Roy, Margaret Ann
: APPLICANT: Stewart, Timothy A.
: APPLICANT: Tumas, Daniel
: APPLICANT: Watanabe, Colin K.
: APPLICANT: Williams, P. Mickey
: APPLICANT: Wood, William I.
: APPLICANT: Zhang, Zemin
: TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
: TITLE OF INVENTION: Acids Encoding the Same
: FILE REFERENCE: P2730P1019
: CURRENT APPLICATION NUMBER: US/09/990.444
: CURRENT FILING DATE: 2001-11-14
: PRIOR APPLICATION NUMBER: 60/049787
: PRIOR FILING DATE: 1997-06-16
: PRIOR APPLICATION NUMBER: 60/062250
: PRIOR FILING DATE: 1997-10-17
: PRIOR APPLICATION NUMBER: 60/065186
: PRIOR FILING DATE: 1997-11-12
: PRIOR APPLICATION NUMBER: 60/065311
: PRIOR FILING DATE: 1997-11-13
: PRIOR APPLICATION NUMBER: 60/066770
: PRIOR FILING DATE: 1997-11-24
: PRIOR APPLICATION NUMBER: 60/075945
: PRIOR FILING DATE: 1998-02-25
: PRIOR APPLICATION NUMBER: 60/078910
: PRIOR FILING DATE: 1998-03-20
: PRIOR APPLICATION NUMBER: 60/083322
: PRIOR FILING DATE: 1998-04-28
: PRIOR APPLICATION NUMBER: 60/084600
: PRIOR FILING DATE: 1998-05-07
: PRIOR APPLICATION NUMBER: 60/087106
: PRIOR FILING DATE: 1998-05-28
: PRIOR APPLICATION NUMBER: 60/087607
: PRIOR FILING DATE: 1998-06-02
: PRIOR APPLICATION NUMBER: 60/087609
: PRIOR FILING DATE: 1998-06-02
: PRIOR APPLICATION NUMBER: 60/087759
: PRIOR FILING DATE: 1998-06-02
: PRIOR APPLICATION NUMBER: 60/087827
: PRIOR FILING DATE: 1998-06-03
: PRIOR APPLICATION NUMBER: 60/088021
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088025
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088026
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088028
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088029
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088030
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088033
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088036
: PRIOR FILING DATE: 1998-06-04
: PRIOR APPLICATION NUMBER: 60/088167
: PRIOR FILING DATE: 1998-06-05
: PRIOR APPLICATION NUMBER: 60/088202
: PRIOR FILING DATE: 1998-06-05
: PRIOR APPLICATION NUMBER: 60/088212
: PRIOR FILING DATE: 1998-06-05
: PRIOR APPLICATION NUMBER: 60/088217
: PRIOR FILING DATE: 1998-06-05
: PRIOR APPLICATION NUMBER: 60/088655
: PRIOR FILING DATE: 1998-06-09
: PRIOR APPLICATION NUMBER: 60/088734
: PRIOR FILING DATE: 1998-06-10
: PRIOR APPLICATION NUMBER: 60/088738
: PRIOR FILING DATE: 1998-06-10
: PRIOR APPLICATION NUMBER: 60/088742
: PRIOR FILING DATE: 1998-06-10
: PRIOR APPLICATION NUMBER: 60/088810
: PRIOR FILING DATE: 1998-06-10
: PRIOR APPLICATION NUMBER: 60/088824
: PRIOR FILING DATE: 1998-06-10
: PRIOR APPLICATION NUMBER: 60/088826
: PRIOR FILING DATE: 1998-06-10
: PRIOR APPLICATION NUMBER: 60/088858
: PRIOR FILING DATE: 1998-06-11
: PRIOR APPLICATION NUMBER: 60/088861
: PRIOR FILING DATE: 1998-06-11
: PRIOR APPLICATION NUMBER: 60/088876
: PRIOR FILING DATE: 1998-06-11
: PRIOR APPLICATION NUMBER: 60/089105
: PRIOR FILING DATE: 1998-06-12
: PRIOR APPLICATION NUMBER: 60/089440
: PRIOR FILING DATE: 1998-06-16
: PRIOR APPLICATION NUMBER: 60/089512
: PRIOR FILING DATE: 1998-06-16
: PRIOR APPLICATION NUMBER: 60/089514
: PRIOR FILING DATE: 1998-06-16
: PRIOR APPLICATION NUMBER: 60/089532
: PRIOR FILING DATE: 1998-06-17
: PRIOR APPLICATION NUMBER: 60/089538
: PRIOR FILING DATE: 1998-06-17
: PRIOR APPLICATION NUMBER: 60/089598
: PRIOR FILING DATE: 1998-06-17
: PRIOR APPLICATION NUMBER: 60/089599
: PRIOR FILING DATE: 1998-06-17
: PRIOR APPLICATION NUMBER: 60/089600
: PRIOR FILING DATE: 1998-06-17
: PRIOR APPLICATION NUMBER: 60/089653
: PRIOR FILING DATE: 1998-06-17
: PRIOR APPLICATION NUMBER: 60/089801
: PRIOR FILING DATE: 1998-06-18
: PRIOR APPLICATION NUMBER: 60/089807
: PRIOR FILING DATE: 1998-06-18
: PRIOR APPLICATION NUMBER: 60/089908
: PRIOR FILING DATE: 1998-06-18
: PRIOR APPLICATION NUMBER: 60/089947
: PRIOR FILING DATE: 1998-06-19
: PRIOR APPLICATION NUMBER: 60/089948
: PRIOR FILING DATE: 1998-06-19
: PRIOR APPLICATION NUMBER: 60/089952
: PRIOR FILING DATE: 1998-06-19
: PRIOR APPLICATION NUMBER: 60/090246
```

```

1 PRIOR FILING DATE: 1998-06-22
2 PRIOR APPLICATION NUMBER: 60/090252
3 PRIOR FILING DATE: 1998-06-22
4 PRIOR APPLICATION NUMBER: 60/090254
5 PRIOR FILING DATE: 1998-06-22
6 PRIOR APPLICATION NUMBER: 60/090449
7 PRIOR FILING DATE: 1998-06-23
8 PRIOR APPLICATION NUMBER: 60/090455
9 PRIOR FILING DATE: 1998-06-23
10 PRIOR APPLICATION NUMBER: 60/090429
11 PRIOR FILING DATE: 1998-06-24
12 PRIOR APPLICATION NUMBER: 60/090441
13 PRIOR FILING DATE: 1998-06-24
14 PRIOR APPLICATION NUMBER: 60/090445
15 PRIOR FILING DATE: 1998-06-24
16 PRIOR APPLICATION NUMBER: 60/090472
17 PRIOR FILING DATE: 1998-06-24
18 PRIOR APPLICATION NUMBER: 60/090545
19 PRIOR FILING DATE: 1998-06-24
20 PRIOR APPLICATION NUMBER: 60/090540
21 PRIOR FILING DATE: 1998-06-24
22 PRIOR APPLICATION NUMBER: 60/090542
23 PRIOR FILING DATE: 1998-06-24
24 PRIOR APPLICATION NUMBER: 60/090557
25 PRIOR FILING DATE: 1998-06-24
26 PRIOR APPLICATION NUMBER: 60/090676
27 PRIOR FILING DATE: 1998-06-25
28 PRIOR APPLICATION NUMBER: 60/090678
29 PRIOR FILING DATE: 1998-06-25
30 PRIOR APPLICATION NUMBER: 60/090690
31 PRIOR FILING DATE: 1998-06-25
32 PRIOR APPLICATION NUMBER: 60/090694
33 PRIOR FILING DATE: 1998-06-25
34 PRIOR APPLICATION NUMBER: 60/090645
35 PRIOR FILING DATE: 1998-06-25
36 PRIOR APPLICATION NUMBER: 60/090696
37 PRIOR FILING DATE: 1998-06-25
38 PRIOR APPLICATION NUMBER: 60/090862
39 PRIOR FILING DATE: 1998-06-26
40 PRIOR APPLICATION NUMBER: 60/090863
41 PRIOR FILING DATE: 1998-06-26
42 PRIOR APPLICATION NUMBER: 60/091360
43 PRIOR FILING DATE: 1998-07-01
44 PRIOR APPLICATION NUMBER: 60/091478
45 PRIOR FILING DATE: 1998-07-02
46 PRIOR APPLICATION NUMBER: 60/091544
47 PRIOR FILING DATE: 1998-07-01
48 PRIOR APPLICATION NUMBER: 60/091519
49 PRIOR FILING DATE: 1998-07-02
50 PRIOR APPLICATION NUMBER: 60/091626
51 PRIOR FILING DATE: 1998-07-02
52 PRIOR APPLICATION NUMBER: 60/091633
53 PRIOR FILING DATE: 1998-07-02
54 PRIOR APPLICATION NUMBER: 60/091978
55 PRIOR FILING DATE: 1998-07-07
56 PRIOR APPLICATION NUMBER: 60/091982
57 PRIOR FILING DATE: 1998-07-07
58 PRIOR APPLICATION NUMBER: 60/092182
59 PRIOR FILING DATE: 1998-07-09

```

Query Match: 63.8%; Score 13.4; DB 9; Length 21;

Best Local Similarity: 94.4%; Prod. No. 2.4e+04;

Matches: 14; Conservative: 0; Mismatches: 1; Indels: 0; Gaps: 0;

QY 2 ACCGATGGAGGCGC 16

100 111111111111

100 4 ACGAAGGAGGCGC 17

```

RESULT 7
US-09-989-740-428
1 Sequence: 428; Application: US/09989740
2 Publication No.: US20020197674A1
3 GENERAL INFORMATION:
4 APPLICANT: Ashkenazi, Avi J.
5 APPLICANT: Baker, Kevin P.
6 APPLICANT: Bakstein, David
7 APPLICANT: Besnoyeys, Ilse
8 APPLICANT: Eaton, Dan L.
9 APPLICANT: Ferrara, Napoleone
10 APPLICANT: Ford, Sherman
11 APPLICANT: Gerber, Hanspeter
12 APPLICANT: Gottlieb, Mary E.
13 APPLICANT: Goddard, Audrey
14 APPLICANT: Godowski, Paul J.
15 APPLICANT: Grimaldi, J. Christopher
16 APPLICANT: Gutney, Austin L.
17 APPLICANT: Klayman, Ivan J.
18 APPLICANT: Napier, Mary A.
19 APPLICANT: Pan, James
20 APPLICANT: Panti, Nicholas F.
21 APPLICANT: Roy, Margaret Ann
22 APPLICANT: Stewart, Timothy A.
23 APPLICANT: Thomas, Daniel
24 APPLICANT: Watanabe, Colin K.
25 APPLICANT: Williams, P. Mickey
26 APPLICANT: Wood, William L.
27 APPLICANT: Zhang, Zhen
28 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
29 FILE REFERENCE: 127-60109
30 CURRENT APPLICATION NUMBER: US/09989740
31 CURRENT FILING DATE: 2001-11-20
32 PRIOR APPLICATION NUMBER: 60/049787
33 PRIOR FILING DATE: 1997-06-16
34 PRIOR APPLICATION NUMBER: 60/062250
35 PRIOR FILING DATE: 1997-10-17
36 PRIOR APPLICATION NUMBER: 60/065186
37 PRIOR FILING DATE: 1997-11-12
38 PRIOR APPLICATION NUMBER: 60/065411
39 PRIOR FILING DATE: 1997-11-13
40 PRIOR APPLICATION NUMBER: 60/066770
41 PRIOR FILING DATE: 1997-11-24
42 PRIOR APPLICATION NUMBER: 60/075945
43 PRIOR FILING DATE: 1998-02-25
44 PRIOR APPLICATION NUMBER: 60/078910
45 PRIOR FILING DATE: 1998-04-20
46 PRIOR APPLICATION NUMBER: 60/083322
47 PRIOR FILING DATE: 1998-04-28
48 PRIOR APPLICATION NUMBER: 60/084600
49 PRIOR FILING DATE: 1998-05-07
50 PRIOR APPLICATION NUMBER: 60/087106
51 PRIOR FILING DATE: 1998-05-28
52 PRIOR APPLICATION NUMBER: 60/087607
53 PRIOR FILING DATE: 1998-06-02
54 PRIOR APPLICATION NUMBER: 60/087609
55 PRIOR FILING DATE: 1998-06-02
56 PRIOR APPLICATION NUMBER: 60/087759
57 PRIOR FILING DATE: 1998-06-02
58 PRIOR APPLICATION NUMBER: 60/087827
59 PRIOR FILING DATE: 1998-06-04
60 PRIOR APPLICATION NUMBER: 60/088021
61 PRIOR FILING DATE: 1998-06-04
62 PRIOR APPLICATION NUMBER: 60/088025
63 PRIOR FILING DATE: 1998-06-04
64 PRIOR APPLICATION NUMBER: 60/088026
65 PRIOR FILING DATE: 1998-06-04
66 PRIOR APPLICATION NUMBER: 60/088028
67 PRIOR FILING DATE: 1998-06-04
68 PRIOR APPLICATION NUMBER: 60/088029
69 PRIOR FILING DATE: 1998-06-04
70 PRIOR APPLICATION NUMBER: 60/088030

```

1 PRIOR FILING DATE: 1998-06-04  
2 PRIOR APPLICATION NUMBER: 60/088034  
3 PRIOR FILING DATE: 1998-06-04  
4 PRIOR APPLICATION NUMBER: 60/088126  
5 PRIOR FILING DATE: 1998-06-04  
6 PRIOR APPLICATION NUMBER: 60/088167  
7 PRIOR FILING DATE: 1998-06-05  
8 PRIOR APPLICATION NUMBER: 60/088202  
9 PRIOR FILING DATE: 1998-06-05  
10 PRIOR APPLICATION NUMBER: 60/088212  
11 PRIOR FILING DATE: 1998-06-05  
12 PRIOR APPLICATION NUMBER: 60/088217  
13 PRIOR FILING DATE: 1998-06-05  
14 PRIOR APPLICATION NUMBER: 60/088555  
15 PRIOR FILING DATE: 1998-06-09  
16 PRIOR APPLICATION NUMBER: 60/088744  
17 PRIOR FILING DATE: 1998-06-10  
18 PRIOR APPLICATION NUMBER: 60/088748  
19 PRIOR FILING DATE: 1998-06-10  
20 PRIOR APPLICATION NUMBER: 60/088742  
21 PRIOR FILING DATE: 1998-06-10  
22 PRIOR APPLICATION NUMBER: 60/088810  
23 PRIOR FILING DATE: 1998-06-10  
24 PRIOR APPLICATION NUMBER: 60/088824  
25 PRIOR FILING DATE: 1998-06-10  
26 PRIOR APPLICATION NUMBER: 60/088826  
27 PRIOR FILING DATE: 1998-06-10  
28 PRIOR APPLICATION NUMBER: 60/088858  
29 PRIOR FILING DATE: 1998-06-11  
30 PRIOR APPLICATION NUMBER: 60/088861  
31 PRIOR FILING DATE: 1998-06-11  
32 PRIOR APPLICATION NUMBER: 60/088876  
33 PRIOR FILING DATE: 1998-06-11  
34 PRIOR APPLICATION NUMBER: 60/089105  
35 PRIOR FILING DATE: 1998-06-12  
36 PRIOR APPLICATION NUMBER: 60/089440  
37 PRIOR FILING DATE: 1998-06-16  
38 PRIOR APPLICATION NUMBER: 60/089512  
39 PRIOR FILING DATE: 1998-06-16  
40 PRIOR APPLICATION NUMBER: 60/089514  
41 PRIOR FILING DATE: 1998-06-16  
42 PRIOR APPLICATION NUMBER: 60/089532  
43 PRIOR FILING DATE: 1998-06-17  
44 PRIOR APPLICATION NUMBER: 60/089538  
45 PRIOR FILING DATE: 1998-06-17  
46 PRIOR APPLICATION NUMBER: 60/089598  
47 PRIOR FILING DATE: 1998-06-17  
48 PRIOR APPLICATION NUMBER: 60/089599  
49 PRIOR FILING DATE: 1998-06-17  
50 PRIOR APPLICATION NUMBER: 60/089600  
51 PRIOR FILING DATE: 1998-06-17  
52 PRIOR APPLICATION NUMBER: 60/089653  
53 PRIOR FILING DATE: 1998-06-17  
54 PRIOR APPLICATION NUMBER: 60/089801  
55 PRIOR FILING DATE: 1998-06-18  
56 PRIOR APPLICATION NUMBER: 60/089907  
57 PRIOR FILING DATE: 1998-06-18  
58 PRIOR APPLICATION NUMBER: 60/089908  
59 PRIOR FILING DATE: 1998-06-18  
60 PRIOR APPLICATION NUMBER: 60/089947  
61 PRIOR FILING DATE: 1998-06-19  
62 PRIOR APPLICATION NUMBER: 60/089948  
63 PRIOR FILING DATE: 1998-06-19  
64 PRIOR APPLICATION NUMBER: 60/089952  
65 PRIOR FILING DATE: 1998-06-19  
66 PRIOR APPLICATION NUMBER: 60/090246  
67 PRIOR FILING DATE: 1998-06-22  
68 PRIOR APPLICATION NUMBER: 60/090252  
69 PRIOR FILING DATE: 1998-06-22  
70 PRIOR APPLICATION NUMBER: 60/090254  
71 PRIOR FILING DATE: 1998-06-22  
72 PRIOR APPLICATION NUMBER: 60/090349  
73 PRIOR FILING DATE: 1998-06-24

1 PRIOR APPLICATION NUMBER: 60/090455  
2 PRIOR FILING DATE: 1998-06-24  
3 PRIOR APPLICATION NUMBER: 60/090429  
4 PRIOR FILING DATE: 1998-06-24  
5 PRIOR APPLICATION NUMBER: 60/090431  
6 PRIOR FILING DATE: 1998-06-24  
7 PRIOR APPLICATION NUMBER: 60/090435  
8 PRIOR FILING DATE: 1998-06-24  
9 PRIOR APPLICATION NUMBER: 60/090444  
10 PRIOR FILING DATE: 1998-06-24  
11 PRIOR APPLICATION NUMBER: 60/090445  
12 PRIOR FILING DATE: 1998-06-24  
13 PRIOR APPLICATION NUMBER: 60/090472  
14 PRIOR FILING DATE: 1998-06-24  
15 PRIOR APPLICATION NUMBER: 60/090535  
16 PRIOR FILING DATE: 1998-06-24  
17 PRIOR APPLICATION NUMBER: 60/090540  
18 PRIOR FILING DATE: 1998-06-24  
19 PRIOR APPLICATION NUMBER: 60/090542  
20 PRIOR FILING DATE: 1998-06-24  
21 PRIOR APPLICATION NUMBER: 60/090557  
22 PRIOR FILING DATE: 1998-06-24  
23 PRIOR APPLICATION NUMBER: 60/090676  
24 PRIOR FILING DATE: 1998-06-25  
25 PRIOR APPLICATION NUMBER: 60/090678  
26 PRIOR FILING DATE: 1998-06-25  
27 PRIOR APPLICATION NUMBER: 60/090690  
28 PRIOR FILING DATE: 1998-06-25  
29 PRIOR APPLICATION NUMBER: 60/090694  
30 PRIOR FILING DATE: 1998-06-25  
31 PRIOR APPLICATION NUMBER: 60/090695  
32 PRIOR FILING DATE: 1998-06-25  
33 PRIOR APPLICATION NUMBER: 60/090696  
34 PRIOR FILING DATE: 1998-06-25  
35 PRIOR APPLICATION NUMBER: 60/090862  
36 PRIOR FILING DATE: 1998-06-26  
37 PRIOR APPLICATION NUMBER: 60/090863  
38 PRIOR FILING DATE: 1998-06-26  
39 PRIOR APPLICATION NUMBER: 60/091460  
40 PRIOR FILING DATE: 1998-07-01  
41 PRIOR APPLICATION NUMBER: 60/091478  
42 PRIOR FILING DATE: 1998-07-02  
43 PRIOR APPLICATION NUMBER: 60/091544  
44 PRIOR FILING DATE: 1998-07-01  
45 PRIOR APPLICATION NUMBER: 60/091519  
46 PRIOR FILING DATE: 1998-07-02  
47 PRIOR APPLICATION NUMBER: 60/091626  
48 PRIOR FILING DATE: 1998-07-02  
49 PRIOR APPLICATION NUMBER: 60/091633  
50 PRIOR FILING DATE: 1998-07-02  
51 PRIOR APPLICATION NUMBER: 60/091978  
52 PRIOR FILING DATE: 1998-07-07  
53 PRIOR APPLICATION NUMBER: 60/091982  
54 PRIOR FILING DATE: 1998-07-07  
55 PRIOR APPLICATION NUMBER: 60/092182  
56 PRIOR FILING DATE: 1998-07-09

Query Match 63.88; Score 13.4; Pos 9; Length 21;

Best Local Similarity 93.48; Prod. No. 2, 3e-03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 ACCAAGGAGGAGG 16

11111111111111111111

10b 3 ACCAAGGAGGAGG 17

RESULT 8

US 09-900-436-428

Sequence 428; Application US/0990436

Publication No. US20020198148A1

GENERAL INFORMATION:

APPLICANT: Ashford, L. Avi J.

APPLICANT: Ashford, Kevin P.

1 APPLICANT: Bolstein, David  
2 APPLICANT: Besnieres, Luc  
3 APPLICANT: Eaton, Ian L.  
4 APPLICANT: Ferrara, Napoleone  
5 APPLICANT: Ford, Sherman  
6 APPLICANT: Gerber, Hanspeter  
7 APPLICANT: Gertlson, Mary E.  
8 APPLICANT: Goddard, Audrey  
9 APPLICANT: Godowski, Paul J.  
10 APPLICANT: Grimaldi, J. Christopher  
11 APPLICANT: Gurney, Austin L.  
12 APPLICANT: Kijavins, Ivar J.  
13 APPLICANT: Napier, Mary A.  
14 APPLICANT: Pan, James  
15 APPLICANT: Paoni, Nicholas F.  
16 APPLICANT: Roy, Margaret Ann  
17 APPLICANT: Stewart, Timothy A.  
18 APPLICANT: Tomas, Daniel  
19 APPLICANT: Watanabe, Colin K.  
20 APPLICANT: Williams, P. Mickey  
21 APPLICANT: Wood, William L.  
22 APPLICANT: Zhang, Zemin  
23 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
24 TITLE OF INVENTION: Acids Encoding the Same  
25 FILE REFERENCE: P270P1C14  
26 CURRENT APPLICATION NUMBER: US/09/990,436  
27 CURRENT FILING DATE: 2001-11-14  
28 PRIOR APPLICATION NUMBER: 60/049787  
29 PRIOR FILING DATE: 1997-06-16  
30 PRIOR APPLICATION NUMBER: 60/062250  
31 PRIOR FILING DATE: 1997-10-17  
32 PRIOR APPLICATION NUMBER: 60/065186  
33 PRIOR FILING DATE: 1997-11-12  
34 PRIOR APPLICATION NUMBER: 60/065411  
35 PRIOR FILING DATE: 1997-11-14  
36 PRIOR APPLICATION NUMBER: 60/066770  
37 PRIOR FILING DATE: 1997-11-24  
38 PRIOR APPLICATION NUMBER: 60/075945  
39 PRIOR FILING DATE: 1998-02-25  
40 PRIOR APPLICATION NUMBER: 60/078910  
41 PRIOR FILING DATE: 1998-03-20  
42 PRIOR APPLICATION NUMBER: 60/084422  
43 PRIOR FILING DATE: 1998-04-28  
44 PRIOR APPLICATION NUMBER: 60/084600  
45 PRIOR FILING DATE: 1998-05-07  
46 PRIOR APPLICATION NUMBER: 60/087106  
47 PRIOR FILING DATE: 1998-05-28  
48 PRIOR APPLICATION NUMBER: 60/087607  
49 PRIOR FILING DATE: 1998-06-02  
50 PRIOR APPLICATION NUMBER: 60/087609  
51 PRIOR FILING DATE: 1998-06-02  
52 PRIOR APPLICATION NUMBER: 60/087759  
53 PRIOR FILING DATE: 1998-06-02  
54 PRIOR APPLICATION NUMBER: 60/087827  
55 PRIOR FILING DATE: 1998-06-03  
56 PRIOR APPLICATION NUMBER: 60/088021  
57 PRIOR FILING DATE: 1998-06-04  
58 PRIOR APPLICATION NUMBER: 60/088025  
59 PRIOR FILING DATE: 1998-06-04  
60 PRIOR APPLICATION NUMBER: 60/088026  
61 PRIOR FILING DATE: 1998-06-04  
62 PRIOR APPLICATION NUMBER: 60/088028  
63 PRIOR FILING DATE: 1998-06-04  
64 PRIOR APPLICATION NUMBER: 60/088029  
65 PRIOR FILING DATE: 1998-06-04  
66 PRIOR APPLICATION NUMBER: 60/088040  
67 PRIOR FILING DATE: 1998-06-04  
68 PRIOR APPLICATION NUMBER: 60/088044  
69 PRIOR FILING DATE: 1998-06-04  
70 PRIOR APPLICATION NUMBER: 60/088046  
71 PRIOR FILING DATE: 1998-06-04  
72 PRIOR APPLICATION NUMBER: 60/088167  
73 PRIOR FILING DATE: 1998-06-05  
74 PRIOR APPLICATION NUMBER: 60/088202  
75 PRIOR FILING DATE: 1998-06-05  
76 PRIOR APPLICATION NUMBER: 60/088212  
77 PRIOR FILING DATE: 1998-06-05  
78 PRIOR APPLICATION NUMBER: 60/088217  
79 PRIOR FILING DATE: 1998-06-05  
80 PRIOR APPLICATION NUMBER: 60/088655  
81 PRIOR FILING DATE: 1998-06-09  
82 PRIOR APPLICATION NUMBER: 60/088744  
83 PRIOR FILING DATE: 1998-06-10  
84 PRIOR APPLICATION NUMBER: 60/088748  
85 PRIOR FILING DATE: 1998-06-10  
86 PRIOR APPLICATION NUMBER: 60/088742  
87 PRIOR FILING DATE: 1998-06-10  
88 PRIOR APPLICATION NUMBER: 60/088810  
89 PRIOR FILING DATE: 1998-06-10  
90 PRIOR APPLICATION NUMBER: 60/088824  
91 PRIOR FILING DATE: 1998-06-10  
92 PRIOR APPLICATION NUMBER: 60/088826  
93 PRIOR FILING DATE: 1998-06-10  
94 PRIOR APPLICATION NUMBER: 60/088858  
95 PRIOR FILING DATE: 1998-06-11  
96 PRIOR APPLICATION NUMBER: 60/088861  
97 PRIOR FILING DATE: 1998-06-11  
98 PRIOR APPLICATION NUMBER: 60/088876  
99 PRIOR FILING DATE: 1998-06-11  
100 PRIOR APPLICATION NUMBER: 60/089105  
101 PRIOR FILING DATE: 1998-06-12  
102 PRIOR APPLICATION NUMBER: 60/089440  
103 PRIOR FILING DATE: 1998-06-16  
104 PRIOR APPLICATION NUMBER: 60/089512  
105 PRIOR FILING DATE: 1998-06-16  
106 PRIOR APPLICATION NUMBER: 60/089514  
107 PRIOR FILING DATE: 1998-06-16  
108 PRIOR APPLICATION NUMBER: 60/089532  
109 PRIOR FILING DATE: 1998-06-17  
110 PRIOR APPLICATION NUMBER: 60/089548  
111 PRIOR FILING DATE: 1998-06-17  
112 PRIOR APPLICATION NUMBER: 60/089598  
113 PRIOR FILING DATE: 1998-06-17  
114 PRIOR APPLICATION NUMBER: 60/089599  
115 PRIOR FILING DATE: 1998-06-17  
116 PRIOR APPLICATION NUMBER: 60/089600  
117 PRIOR FILING DATE: 1998-06-17  
118 PRIOR APPLICATION NUMBER: 60/089654  
119 PRIOR FILING DATE: 1998-06-17  
120 PRIOR APPLICATION NUMBER: 60/089801  
121 PRIOR FILING DATE: 1998-06-18  
122 PRIOR APPLICATION NUMBER: 60/089907  
123 PRIOR FILING DATE: 1998-06-18  
124 PRIOR APPLICATION NUMBER: 60/089908  
125 PRIOR FILING DATE: 1998-06-18  
126 PRIOR APPLICATION NUMBER: 60/089947  
127 PRIOR FILING DATE: 1998-06-19  
128 PRIOR APPLICATION NUMBER: 60/089948  
129 PRIOR FILING DATE: 1998-06-19  
130 PRIOR APPLICATION NUMBER: 60/089952  
131 PRIOR FILING DATE: 1998-06-19  
132 PRIOR APPLICATION NUMBER: 60/090246  
133 PRIOR FILING DATE: 1998-06-22  
134 PRIOR APPLICATION NUMBER: 60/090252  
135 PRIOR FILING DATE: 1998-06-22  
136 PRIOR APPLICATION NUMBER: 60/090254  
137 PRIOR FILING DATE: 1998-06-22  
138 PRIOR APPLICATION NUMBER: 60/090449  
139 PRIOR FILING DATE: 1998-06-24  
140 PRIOR APPLICATION NUMBER: 60/090455  
141 PRIOR FILING DATE: 1998-06-24  
142 PRIOR APPLICATION NUMBER: 60/090429  
143 PRIOR FILING DATE: 1998-06-24  
144 PRIOR APPLICATION NUMBER: 60/090451  
145 PRIOR FILING DATE: 1998-06-24  
146 PRIOR APPLICATION NUMBER: 60/090455

? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090444  
 ? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090445  
 ? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090472  
 ? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090535  
 ? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090540  
 ? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090542  
 ? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090557  
 ? PRIOR FILING DATE: 1998-06-24  
 ? PRIOR APPLICATION NUMBER: 60/090676  
 ? PRIOR FILING DATE: 1998-06-25  
 ? PRIOR APPLICATION NUMBER: 60/090678  
 ? PRIOR FILING DATE: 1998-06-25  
 ? PRIOR APPLICATION NUMBER: 60/090690  
 ? PRIOR FILING DATE: 1998-06-25  
 ? PRIOR APPLICATION NUMBER: 60/090694  
 ? PRIOR FILING DATE: 1998-06-25  
 ? PRIOR APPLICATION NUMBER: 60/090695  
 ? PRIOR FILING DATE: 1998-06-25  
 ? PRIOR APPLICATION NUMBER: 60/090696  
 ? PRIOR FILING DATE: 1998-06-25  
 ? PRIOR APPLICATION NUMBER: 60/090862  
 ? PRIOR FILING DATE: 1998-06-26  
 ? PRIOR APPLICATION NUMBER: 60/090863  
 ? PRIOR FILING DATE: 1998-06-26  
 ? PRIOR APPLICATION NUMBER: 60/091360  
 ? PRIOR FILING DATE: 1998-07-01  
 ? PRIOR APPLICATION NUMBER: 60/091478  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091544  
 ? PRIOR FILING DATE: 1998-07-01  
 ? PRIOR APPLICATION NUMBER: 60/091519  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091626  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091633  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091978  
 ? PRIOR FILING DATE: 1998-07-07  
 ? PRIOR APPLICATION NUMBER: 60/091982  
 ? PRIOR FILING DATE: 1998-07-07  
 ? PRIOR APPLICATION NUMBER: 60/092182  
 ? PRIOR FILING DATE: 1998-07-09

Query Match 63.8% Score 13.4; DB 9; Length 21;  
 Best Local Similarity 93.38; Prod. No. 2.3e+03;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 AACATGCGACGCGC 16  
 ||| |||||  
 Db 4 AACATGCGACGCGC 17

RESULT 9  
 US-09-901-181-128  
 ; Sequence 428, Application US/09991181  
 ; Publication No: US20020197615A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Ashkenazi, Avi J.  
 ; APPLICANT: Baker, Kevin P.  
 ; APPLICANT: Botstein, David  
 ; APPLICANT: Desnoyers, Luc  
 ; APPLICANT: Eaton, Dan L.  
 ; APPLICANT: Ferrara, Napoleone  
 ; APPLICANT: Fouq, Sherman  
 ; APPLICANT: Gerber, Hanspeter  
 ; APPLICANT: Gerritsen, Mary E.

? APPLICANT: Goddard, Audrey  
 ? APPLICANT: Godowski, Paul J.  
 ? APPLICANT: Grimaldi, J. Christopher  
 ? APPLICANT: Guiney, Austin L.  
 ? APPLICANT: Kljavin, Ivar J.  
 ? APPLICANT: Napier, Mary A.  
 ? APPLICANT: Pan, James  
 ? APPLICANT: Paoni, Nicholas F.  
 ? APPLICANT: Roy, Margaret Ann  
 ? APPLICANT: Stewart, Timothy A.  
 ? APPLICANT: Tomas, Daniel  
 ? APPLICANT: Watanabe, Colin K.  
 ? APPLICANT: Williams, P. Mickey  
 ? APPLICANT: Wood, William I.  
 ? APPLICANT: Zhang, Zemin  
 ? TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 ? FILE REFERENCE: Acids Encoding the Same  
 ? CURRENT APPLICATION NUMBER: US/09/991,181  
 ? CURRENT FILING DATE: 2001-11-16  
 ? PRIOR APPLICATION NUMBER: 60/049787  
 ? PRIOR FILING DATE: 1997-06-16  
 ? PRIOR APPLICATION NUMBER: 60/062250  
 ? PRIOR FILING DATE: 1997-10-17  
 ? PRIOR APPLICATION NUMBER: 60/065186  
 ? PRIOR FILING DATE: 1997-11-12  
 ? PRIOR APPLICATION NUMBER: 60/065311  
 ? PRIOR FILING DATE: 1997-11-14  
 ? PRIOR APPLICATION NUMBER: 60/066770  
 ? PRIOR FILING DATE: 1997-11-24  
 ? PRIOR APPLICATION NUMBER: 60/075945  
 ? PRIOR FILING DATE: 1998-02-25  
 ? PRIOR APPLICATION NUMBER: 60/078910  
 ? PRIOR FILING DATE: 1998-03-20  
 ? PRIOR APPLICATION NUMBER: 60/083322  
 ? PRIOR FILING DATE: 1998-04-28  
 ? PRIOR APPLICATION NUMBER: 60/084600  
 ? PRIOR FILING DATE: 1998-05-07  
 ? PRIOR APPLICATION NUMBER: 60/087106  
 ? PRIOR FILING DATE: 1998-05-28  
 ? PRIOR APPLICATION NUMBER: 60/087607  
 ? PRIOR FILING DATE: 1998-06-02  
 ? PRIOR APPLICATION NUMBER: 60/087609  
 ? PRIOR FILING DATE: 1998-06-02  
 ? PRIOR APPLICATION NUMBER: 60/087759  
 ? PRIOR FILING DATE: 1998-06-02  
 ? PRIOR APPLICATION NUMBER: 60/087827  
 ? PRIOR FILING DATE: 1998-06-03  
 ? PRIOR APPLICATION NUMBER: 60/088021  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088025  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088026  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088028  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088029  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088030  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088033  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088426  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088167  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088202  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088212  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088217  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088655

1 PRIOR FILING DATE: 1998-06-09  
 2 PRIOR APPLICATION NUMBER: 60/088744  
 3 PRIOR FILING DATE: 1998-06-10  
 4 PRIOR APPLICATION NUMBER: 60/088748  
 5 PRIOR FILING DATE: 1998-06-10  
 6 PRIOR APPLICATION NUMBER: 60/088742  
 7 PRIOR FILING DATE: 1998-06-10  
 8 PRIOR APPLICATION NUMBER: 60/088810  
 9 PRIOR FILING DATE: 1998-06-10  
 10 PRIOR APPLICATION NUMBER: 60/088824  
 11 PRIOR FILING DATE: 1998-06-10  
 12 PRIOR APPLICATION NUMBER: 60/088826  
 13 PRIOR FILING DATE: 1998-06-10  
 14 PRIOR APPLICATION NUMBER: 60/088858  
 15 PRIOR FILING DATE: 1998-06-11  
 16 PRIOR APPLICATION NUMBER: 60/088861  
 17 PRIOR FILING DATE: 1998-06-11  
 18 PRIOR APPLICATION NUMBER: 60/088876  
 19 PRIOR FILING DATE: 1998-06-11  
 20 PRIOR APPLICATION NUMBER: 60/089105  
 21 PRIOR FILING DATE: 1998-06-12  
 22 PRIOR APPLICATION NUMBER: 60/089440  
 23 PRIOR FILING DATE: 1998-06-16  
 24 PRIOR APPLICATION NUMBER: 60/089512  
 25 PRIOR FILING DATE: 1998-06-16  
 26 PRIOR APPLICATION NUMBER: 60/089514  
 27 PRIOR FILING DATE: 1998-06-16  
 28 PRIOR APPLICATION NUMBER: 60/089542  
 29 PRIOR FILING DATE: 1998-06-17  
 30 PRIOR APPLICATION NUMBER: 60/089548  
 31 PRIOR FILING DATE: 1998-06-17  
 32 PRIOR APPLICATION NUMBER: 60/089598  
 33 PRIOR FILING DATE: 1998-06-17  
 34 PRIOR APPLICATION NUMBER: 60/089599  
 35 PRIOR FILING DATE: 1998-06-17  
 36 PRIOR APPLICATION NUMBER: 60/089600  
 37 PRIOR FILING DATE: 1998-06-17  
 38 PRIOR APPLICATION NUMBER: 60/089653  
 39 PRIOR FILING DATE: 1998-06-17  
 40 PRIOR APPLICATION NUMBER: 60/089801  
 41 PRIOR FILING DATE: 1998-06-18  
 42 PRIOR APPLICATION NUMBER: 60/089907  
 43 PRIOR FILING DATE: 1998-06-18  
 44 PRIOR APPLICATION NUMBER: 60/089908  
 45 PRIOR FILING DATE: 1998-06-18  
 46 PRIOR APPLICATION NUMBER: 60/089947  
 47 PRIOR FILING DATE: 1998-06-19  
 48 PRIOR APPLICATION NUMBER: 60/089948  
 49 PRIOR FILING DATE: 1998-06-19  
 50 PRIOR APPLICATION NUMBER: 60/089952  
 51 PRIOR FILING DATE: 1998-06-19  
 52 PRIOR APPLICATION NUMBER: 60/090246  
 53 PRIOR FILING DATE: 1998-06-22  
 54 PRIOR APPLICATION NUMBER: 60/090252  
 55 PRIOR FILING DATE: 1998-06-22  
 56 PRIOR APPLICATION NUMBER: 60/090254  
 57 PRIOR FILING DATE: 1998-06-22  
 58 PRIOR APPLICATION NUMBER: 60/090439  
 59 PRIOR FILING DATE: 1998-06-24  
 60 PRIOR APPLICATION NUMBER: 60/090455  
 61 PRIOR FILING DATE: 1998-06-24  
 62 PRIOR APPLICATION NUMBER: 60/090429  
 63 PRIOR FILING DATE: 1998-06-24  
 64 PRIOR APPLICATION NUMBER: 60/090441  
 65 PRIOR FILING DATE: 1998-06-24  
 66 PRIOR APPLICATION NUMBER: 60/090445  
 67 PRIOR FILING DATE: 1998-06-24  
 68 PRIOR APPLICATION NUMBER: 60/090472  
 69 PRIOR FILING DATE: 1998-06-24

1 PRIOR APPLICATION NUMBER: 60/090535  
 2 PRIOR FILING DATE: 1998-06-24  
 3 PRIOR APPLICATION NUMBER: 60/090540  
 4 PRIOR FILING DATE: 1998-06-24  
 5 PRIOR APPLICATION NUMBER: 60/090542  
 6 PRIOR FILING DATE: 1998-06-24  
 7 PRIOR APPLICATION NUMBER: 60/090551  
 8 PRIOR FILING DATE: 1998-06-24  
 9 PRIOR APPLICATION NUMBER: 60/090676  
 10 PRIOR FILING DATE: 1998-06-25  
 11 PRIOR APPLICATION NUMBER: 60/090678  
 12 PRIOR FILING DATE: 1998-06-25  
 13 PRIOR APPLICATION NUMBER: 60/090690  
 14 PRIOR FILING DATE: 1998-06-25  
 15 PRIOR APPLICATION NUMBER: 60/090694  
 16 PRIOR FILING DATE: 1998-06-25  
 17 PRIOR APPLICATION NUMBER: 60/090695  
 18 PRIOR FILING DATE: 1998-06-25  
 19 PRIOR APPLICATION NUMBER: 60/090696  
 20 PRIOR FILING DATE: 1998-06-25  
 21 PRIOR APPLICATION NUMBER: 60/090862  
 22 PRIOR FILING DATE: 1998-06-26  
 23 PRIOR APPLICATION NUMBER: 60/090863  
 24 PRIOR FILING DATE: 1998-06-26  
 25 PRIOR APPLICATION NUMBER: 60/091460  
 26 PRIOR FILING DATE: 1998-07-01  
 27 PRIOR APPLICATION NUMBER: 60/091478  
 28 PRIOR FILING DATE: 1998-07-02  
 29 PRIOR APPLICATION NUMBER: 60/091544  
 30 PRIOR FILING DATE: 1998-07-01  
 31 PRIOR APPLICATION NUMBER: 60/091519  
 32 PRIOR FILING DATE: 1998-07-02  
 33 PRIOR APPLICATION NUMBER: 60/091626  
 34 PRIOR FILING DATE: 1998-07-02  
 35 PRIOR APPLICATION NUMBER: 60/091633  
 36 PRIOR FILING DATE: 1998-07-02  
 37 PRIOR APPLICATION NUMBER: 60/091978  
 38 PRIOR FILING DATE: 1998-07-07  
 39 PRIOR APPLICATION NUMBER: 60/091982  
 40 PRIOR FILING DATE: 1998-07-07  
 41 PRIOR APPLICATION NUMBER: 60/092182  
 42 PRIOR FILING DATE: 1998-07-09

Query Match: 63.88% Score: 10.4; PR: 9; Length: 21;  
 Best Local Similarity: 93.49%; Pred. No. 2: 60043;  
 Matches: 14; Character Size: 0; Mismatches: 1; Indels: 0; Gaps: 0;

QY 2 AAAAAAGGAGGGG 16  
 DB 3 AAAAAAGGAGGGG 17

RESULT 10  
 US 09-99-687-428  
 1 Sequence: 428, Application US/09994687  
 2 Publication No. US20020196149A1  
 3 GENERAL INFORMATION:  
 4 APPLICANT: Ashkenazi, Avi J.  
 5 APPLICANT: Baker, Kevin P.  
 6 APPLICANT: Bodenstein, David  
 7 APPLICANT: Desnoyers, Claude  
 8 APPLICANT: Eaton, Dan L.  
 9 APPLICANT: Ferrara, Napoleone  
 10 APPLICANT: Ford, Sherman  
 11 APPLICANT: Gerber, Hanspeter  
 12 APPLICANT: Gottlieb, Mary E.  
 13 APPLICANT: Goddard, Audrey  
 14 APPLICANT: Godowski, Paul L.  
 15 APPLICANT: Grimaldi, Christopher  
 16 APPLICANT: Harney, Austin L.  
 17 APPLICANT: Klevorn, Isaac J.  
 18 APPLICANT: Napier, Mary A.  
 19 APPLICANT: Pan, James

APPLICANT: Faoni, Nicholas F.  
APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Tumes, Daniel  
APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William L.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
TITLE OF INVENTION: Acids Encoded the Same  
FILE REFERENCE: P273010211  
CURRENT APPLICATION NUMBER: US/09/993,687  
CURRENT FILING DATE: 2002-11-14  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/065186  
PRIOR FILING DATE: 1997-11-12  
PRIOR APPLICATION NUMBER: 60/065311  
PRIOR FILING DATE: 1997-11-13  
PRIOR APPLICATION NUMBER: 60/066770  
PRIOR FILING DATE: 1997-11-24  
PRIOR APPLICATION NUMBER: 60/075945  
PRIOR FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/078910  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/083322  
PRIOR FILING DATE: 1998-04-28  
PRIOR APPLICATION NUMBER: 60/084600  
PRIOR FILING DATE: 1998-05-07  
PRIOR APPLICATION NUMBER: 60/087106  
PRIOR FILING DATE: 1998-05-28  
PRIOR APPLICATION NUMBER: 60/087607  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087609  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087759  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087827  
PRIOR FILING DATE: 1998-06-03  
PRIOR APPLICATION NUMBER: 60/088021  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088025  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088026  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088028  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088029  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088030  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088033  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088326  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088167  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088202  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088212  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088217  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088655  
PRIOR FILING DATE: 1998-06-09  
PRIOR APPLICATION NUMBER: 60/088734  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088748  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088742  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088810  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088824  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088826  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088858  
PRIOR FILING DATE: 1998-06-11  
PRIOR APPLICATION NUMBER: 60/088861  
PRIOR FILING DATE: 1998-06-11  
PRIOR APPLICATION NUMBER: 60/088876  
PRIOR FILING DATE: 1998-06-11  
PRIOR APPLICATION NUMBER: 60/089105  
PRIOR FILING DATE: 1998-06-12  
PRIOR APPLICATION NUMBER: 60/089440  
PRIOR FILING DATE: 1998-06-16  
PRIOR APPLICATION NUMBER: 60/089512  
PRIOR FILING DATE: 1998-06-16  
PRIOR APPLICATION NUMBER: 60/089514  
PRIOR FILING DATE: 1998-06-16  
PRIOR APPLICATION NUMBER: 60/089542  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089548  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089598  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089599  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089600  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089653  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089801  
PRIOR FILING DATE: 1998-06-18  
PRIOR APPLICATION NUMBER: 60/089907  
PRIOR FILING DATE: 1998-06-18  
PRIOR APPLICATION NUMBER: 60/089908  
PRIOR FILING DATE: 1998-06-18  
PRIOR APPLICATION NUMBER: 60/089947  
PRIOR FILING DATE: 1998-06-19  
PRIOR APPLICATION NUMBER: 60/089948  
PRIOR FILING DATE: 1998-06-19  
PRIOR APPLICATION NUMBER: 60/089952  
PRIOR FILING DATE: 1998-06-19  
PRIOR APPLICATION NUMBER: 60/090246  
PRIOR FILING DATE: 1998-06-22  
PRIOR APPLICATION NUMBER: 60/090252  
PRIOR FILING DATE: 1998-06-22  
PRIOR APPLICATION NUMBER: 60/090254  
PRIOR FILING DATE: 1998-06-22  
PRIOR APPLICATION NUMBER: 60/090349  
PRIOR FILING DATE: 1998-06-23  
PRIOR APPLICATION NUMBER: 60/090355  
PRIOR FILING DATE: 1998-06-23  
PRIOR APPLICATION NUMBER: 60/090429  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090441  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090445  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090472  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090535  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090540  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090542  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090557

2 PRIOR FILING DATE: 1998-06-24  
 3 PRIOR APPLICATION NUMBER: 60/090676  
 4 PRIOR FILING DATE: 1998-06-25  
 5 PRIOR APPLICATION NUMBER: 60/090678  
 6 PRIOR FILING DATE: 1998-06-25  
 7 PRIOR APPLICATION NUMBER: 60/090690  
 8 PRIOR FILING DATE: 1998-06-25  
 9 PRIOR APPLICATION NUMBER: 60/090694  
 10 PRIOR FILING DATE: 1998-06-25  
 11 PRIOR APPLICATION NUMBER: 60/090695  
 12 PRIOR FILING DATE: 1998-06-25  
 13 PRIOR APPLICATION NUMBER: 60/090696  
 14 PRIOR FILING DATE: 1998-06-25  
 15 PRIOR APPLICATION NUMBER: 60/090862  
 16 PRIOR FILING DATE: 1998-06-26  
 17 PRIOR APPLICATION NUMBER: 60/090863  
 18 PRIOR FILING DATE: 1998-06-26  
 19 PRIOR APPLICATION NUMBER: 60/091460  
 20 PRIOR FILING DATE: 1998-07-01  
 21 PRIOR APPLICATION NUMBER: 60/091478  
 22 PRIOR FILING DATE: 1998-07-02  
 23 PRIOR APPLICATION NUMBER: 60/091544  
 24 PRIOR FILING DATE: 1998-07-01  
 25 PRIOR APPLICATION NUMBER: 60/091519  
 26 PRIOR FILING DATE: 1998-07-02  
 27 PRIOR APPLICATION NUMBER: 60/091626  
 28 PRIOR FILING DATE: 1998-07-02  
 29 PRIOR APPLICATION NUMBER: 60/091633  
 30 PRIOR FILING DATE: 1998-07-02  
 31 PRIOR APPLICATION NUMBER: 60/091978  
 32 PRIOR FILING DATE: 1998-07-07  
 33 PRIOR APPLICATION NUMBER: 60/091982  
 34 PRIOR FILING DATE: 1998-07-07  
 35 PRIOR APPLICATION NUMBER: 60/092182  
 36 PRIOR FILING DATE: 1998-07-09

Query Match 64.88; Score 13.4; DR 9; Length 21;

Best Local Similarity 94.34; Pred. No. 2,4004;

Matches 14; Conserved 0; Mismatches 1; Indels 0; Gaps 0;

UY 2 ACCAATGACACAC 16

UU UUUUUUUUUU

UU 3 ACCAATGACACAC 17

RESULT 11

US-09-989-744-428

Sequence 428, Application US/09089744

Publication No. US2004000531A1

GENERAL INFORMATION:

APPLICANT: Ashkenazi, Avi J.

APPLICANT: Baker, Kevin P.

APPLICANT: Bolstein, David

APPLICANT: Desnoyers, Luc

APPLICANT: Eaton, Dan L.

APPLICANT: Ferrara, Napoleone

APPLICANT: Ford, Sherman

APPLICANT: Gerber, Hanspeter

APPLICANT: Gertsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Grimaldi, J. Christopher

APPLICANT: Gueney, Austin L.

APPLICANT: Klayman, Ivar J.

APPLICANT: Napier, Mary A.

APPLICANT: Pan, James

APPLICANT: Paoni, Nicholas F.

APPLICANT: Roy, Margaret Ann

APPLICANT: Stewart, Timofey A.

APPLICANT: Thomas, Daniel

APPLICANT: Watanabe, Colin K.

APPLICANT: Williams, P. Mickey

APPLICANT: Wood, William L.

2 APPLICANT: Zhang, Zemin  
 3 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 4 FILE REFERENCE: 127,611,964  
 5 CURRENT APPLICATION NUMBER: US/09/989,744  
 6 PRIOR FILING DATE: 2001-11-19  
 7 PRIOR APPLICATION NUMBER: 60/049787  
 8 PRIOR FILING DATE: 1997-06-16  
 9 PRIOR APPLICATION NUMBER: 60/062250  
 10 PRIOR FILING DATE: 1997-10-17  
 11 PRIOR APPLICATION NUMBER: 60/065186  
 12 PRIOR FILING DATE: 1997-11-12  
 13 PRIOR APPLICATION NUMBER: 60/065411  
 14 PRIOR FILING DATE: 1997-11-14  
 15 PRIOR APPLICATION NUMBER: 60/066170  
 16 PRIOR FILING DATE: 1997-11-24  
 17 PRIOR APPLICATION NUMBER: 60/075945  
 18 PRIOR FILING DATE: 1998-02-25  
 19 PRIOR APPLICATION NUMBER: 60/078910  
 20 PRIOR FILING DATE: 1998-03-20  
 21 PRIOR APPLICATION NUMBER: 60/083422  
 22 PRIOR FILING DATE: 1998-03-28  
 23 PRIOR APPLICATION NUMBER: 60/084600  
 24 PRIOR FILING DATE: 1998-05-07  
 25 PRIOR APPLICATION NUMBER: 60/087106  
 26 PRIOR FILING DATE: 1998-05-28  
 27 PRIOR APPLICATION NUMBER: 60/087607  
 28 PRIOR FILING DATE: 1998-06-02  
 29 PRIOR APPLICATION NUMBER: 60/087609  
 30 PRIOR FILING DATE: 1998-06-02  
 31 PRIOR APPLICATION NUMBER: 60/087759  
 32 PRIOR FILING DATE: 1998-06-02  
 33 PRIOR APPLICATION NUMBER: 60/087827  
 34 PRIOR FILING DATE: 1998-06-03  
 35 PRIOR APPLICATION NUMBER: 60/088021  
 36 PRIOR FILING DATE: 1998-06-04  
 37 PRIOR APPLICATION NUMBER: 60/088025  
 38 PRIOR FILING DATE: 1998-06-04  
 39 PRIOR APPLICATION NUMBER: 60/088026  
 40 PRIOR FILING DATE: 1998-06-04  
 41 PRIOR APPLICATION NUMBER: 60/088028  
 42 PRIOR FILING DATE: 1998-06-04  
 43 PRIOR APPLICATION NUMBER: 60/088029  
 44 PRIOR FILING DATE: 1998-06-04  
 45 PRIOR APPLICATION NUMBER: 60/088030  
 46 PRIOR FILING DATE: 1998-06-04  
 47 PRIOR APPLICATION NUMBER: 60/088033  
 48 PRIOR FILING DATE: 1998-06-04  
 49 PRIOR APPLICATION NUMBER: 60/088426  
 50 PRIOR FILING DATE: 1998-06-04  
 51 PRIOR APPLICATION NUMBER: 60/088167  
 52 PRIOR FILING DATE: 1998-06-05  
 53 PRIOR APPLICATION NUMBER: 60/088202  
 54 PRIOR FILING DATE: 1998-06-05  
 55 PRIOR APPLICATION NUMBER: 60/088212  
 56 PRIOR FILING DATE: 1998-06-05  
 57 PRIOR APPLICATION NUMBER: 60/088217  
 58 PRIOR FILING DATE: 1998-06-05  
 59 PRIOR APPLICATION NUMBER: 60/088455  
 60 PRIOR FILING DATE: 1998-06-09  
 61 PRIOR APPLICATION NUMBER: 60/088744  
 62 PRIOR FILING DATE: 1998-06-10  
 63 PRIOR APPLICATION NUMBER: 60/088748  
 64 PRIOR FILING DATE: 1998-06-10  
 65 PRIOR APPLICATION NUMBER: 60/088742  
 66 PRIOR FILING DATE: 1998-06-10  
 67 PRIOR APPLICATION NUMBER: 60/088810  
 68 PRIOR FILING DATE: 1998-06-10  
 69 PRIOR APPLICATION NUMBER: 60/088824  
 70 PRIOR FILING DATE: 1998-06-10  
 71 PRIOR APPLICATION NUMBER: 60/088826  
 72 PRIOR FILING DATE: 1998-06-10  
 73 PRIOR APPLICATION NUMBER: 60/088838



|  |                                      |                       |
|--|--------------------------------------|-----------------------|
| :  | PRIOR APPLICATION NUMBER:            | 60/090862             |
| :  | PRIOR FILING DATE:                   | 1998-06-25            |
| :  | PRIOR APPLICATION NUMBER:            | 60/090865             |
| :  | PRIOR FILING DATE:                   | 1998-06-25            |
| :  | PRIOR APPLICATION NUMBER:            | 60/090866             |
| :  | PRIOR FILING DATE:                   | 1998-06-25            |
| :  | PRIOR APPLICATION NUMBER:            | 60/090867             |
| :  | PRIOR FILING DATE:                   | 1998-06-26            |
| :  | PRIOR APPLICATION NUMBER:            | 60/090863             |
| :  | PRIOR FILING DATE:                   | 1998-06-26            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091460             |
| :  | PRIOR FILING DATE:                   | 1998-07-01            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091478             |
| :  | PRIOR FILING DATE:                   | 1998-07-02            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091544             |
| :  | PRIOR FILING DATE:                   | 1998-07-01            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091519             |
| :  | PRIOR FILING DATE:                   | 1998-07-02            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091426             |
| :  | PRIOR FILING DATE:                   | 1998-07-02            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091843             |
| :  | PRIOR FILING DATE:                   | 1998-07-02            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091978             |
| :  | PRIOR FILING DATE:                   | 1998-07-07            |
| :  | PRIOR APPLICATION NUMBER:            | 60/091982             |
| :  | PRIOR FILING DATE:                   | 1998-07-07            |
| :  | PRIOR APPLICATION NUMBER:            | 60/092182             |
| :  | PRIOR FILING DATE:                   | 1998-07-09            |
| <br>                                     |                                      |                       |
| Query Match            63.8%      Scored |                                      |                       |
| Best Local Similarity    93.8%      Pred |                                      |                       |
| Matches     14:    Conservative    0; M  |                                      |                       |
| <br>                                     |                                      |                       |
| QY                                       | 2                                    | APOCALYPSE: APOCOC 16 |
|  |                                      | 111111111111          |
| 14b                                      | 3                                    | APOCALYPSE: APOCOC 17 |
| <br>                                     |                                      |                       |
| RESULT 12                                |                                      |                       |
| US 01-997-654-2R                         |                                      |                       |
| :  | Sequence 42b, Application US/0999765 |                       |
| :  | Publication No. US2003008297A1       |                       |
| :  | GENERAL INFORMATION:                 |                       |
| :  | APPLICANT: Ashkenazi, Avi J.         |                       |
| :  | APPLICANT: Baker, Kevin P.           |                       |
| :  | APPLICANT: Bechtelstein David        |                       |
| :  | APPLICANT: Desnoyers, Joe            |                       |
| :  | APPLICANT: Eaton, Dan W.             |                       |
| :  | APPLICANT: Ferrara, Napoleone        |                       |
| :  | APPLICANT: Ford, Sherman             |                       |
| :  | APPLICANT: Gerber, Hanspeter         |                       |
| :  | APPLICANT: Gottfrieson, Mary E.      |                       |
| :  | APPLICANT: Goddard, Audrey           |                       |
| :  | APPLICANT: Gadowski, Paul J.         |                       |
| :  | APPLICANT: Grimaldi, J. Christopher  |                       |
| :  | APPLICANT: Gurney, August L.         |                       |
| :  | APPLICANT: Khariton, Victor J.       |                       |
| :  | APPLICANT: Napier, Mary A.           |                       |
| :  | APPLICANT: Pan, James                |                       |
| :  | APPLICANT: Papini, Nicholas F.       |                       |
| :  | APPLICANT: Roy, Margaret Ann         |                       |
| :  | APPLICANT: Stewart, Timothy A.       |                       |
| :  | APPLICANT: Thomas, Daniel            |                       |
| :  | APPLICANT: Watmough, Colin K.        |                       |
| :  | APPLICANT: Williams, P. Mickey       |                       |
| :  | APPLICANT: Wood, William I.          |                       |
| :  | APPLICANT: Charad, Zevulun           |                       |
| :  | TITLE OF INVENTION: Secreted and Ir  |                       |
| :  | TITLE OF INVENTION: Acids Encoding   |                       |
| :  | CURRENT APPLICATION: US/09/99765     |                       |
| :  | CURRENT FILING DATE: 2001-11-15      |                       |
| :  | PRIOR APPLICATION NUMBER: 60/049787  |                       |

Post. Local Similarity 93, 38; Pred. No. 2, 3003;

Matches 14; conservative (); Mismatches 17;

US 01-997

; PUBLICATION NO. US20030008297A1  
: GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

; APPLICANT: Fatchu, Dan A.

[illegible]

; APPLICANT: Goddard, Audrey

APPLICANT: GURNEY, Austin L.

APPLICANT: Napier, Mary A.

APPLICANT: Roy, Margaret Ann

APPLICANT: William, Daniel

; APPLICANT: Wood, William I.

: TITLE OF INVENTION: Acids Encoding

; CURRENT APPLICATION NUMBER: US/04/99

100

[illegible]

```

? PRIOR FILING DATE: 1998-06-26
? PRIOR APPLICATION NUMBER: 60/090863
? PRIOR FILING DATE: 1998-06-26
? PRIOR APPLICATION NUMBER: 60/091460
? PRIOR FILING DATE: 1998-07-01
? PRIOR APPLICATION NUMBER: 60/091478
? PRIOR FILING DATE: 1998-07-02
? PRIOR APPLICATION NUMBER: 60/091544
? PRIOR FILING DATE: 1998-07-01
? PRIOR APPLICATION NUMBER: 60/091519
? PRIOR FILING DATE: 1998-07-02
? PRIOR APPLICATION NUMBER: 60/091626
? PRIOR FILING DATE: 1998-07-02
? PRIOR APPLICATION NUMBER: 60/091643
? PRIOR FILING DATE: 1998-07-02
? PRIOR APPLICATION NUMBER: 60/091978
? PRIOR FILING DATE: 1998-07-07
? PRIOR APPLICATION NUMBER: 60/091982
? PRIOR FILING DATE: 1998-07-07
? PRIOR APPLICATION NUMBER: 60/092182
? PRIOR FILING DATE: 1998-07-09

Query Match: 64.8% Score 14.4; DB % Length 21;
Best Local Similarity 93.4% Pred. No. 2.4e-03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 ANTCATGCAAGGCG 16
DB 111111111111
3 ANTCATGCAAGGCG 17

RESULT 14
US-09-900-115-2-428
? Sequence 428, Application US/09/993667
? Publication No. US2003022187A1
? GENERAL INFORMATION:
? APPLICANT: Ashkenazi, Avi J.
? APPLICANT: Baker, Kevin P.
? APPLICANT: Botstein, David
? APPLICANT: Desnoyers, Luc
? APPLICANT: Eaton, Dan L.
? APPLICANT: Ferrara, Napoleone
? APPLICANT: Fong, Sherman
? APPLICANT: Gerber, Hanspeter
? APPLICANT: Gerritsen, Mary E.
? APPLICANT: Goddard, Audrey
? APPLICANT: Godowski, Paul J.
? APPLICANT: Grimaldi, J. Christopher
? APPLICANT: Gurney, Austin L.
? APPLICANT: Kijavits, Ivar J.
? APPLICANT: Napier, Mary A.
? APPLICANT: Pan, James
? APPLICANT: Paoni, Nicholas F.
? APPLICANT: Roy, Margaret Ann
? APPLICANT: Stewart, Timothy A.
? APPLICANT: Tomas, Daniel
? APPLICANT: Watande, Colin K.
? APPLICANT: Williams, P. Mickey
? APPLICANT: Wood, William J.
? APPLICANT: Zhang, Zemin
? TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
? FILE OF INVENTION: Acids Encoding the Same
? FILE REFERENCE: P2730194
? CURRENT APPLICATION NUMBER: US/09/993,667
? CURRENT FILING DATE: 2001-11-14
? PRIOR APPLICATION NUMBER: 60/049787
? PRIOR FILING DATE: 1997-06-16
? PRIOR APPLICATION NUMBER: 60/052250
? PRIOR FILING DATE: 1997-10-17
? PRIOR APPLICATION NUMBER: 60/055186
? PRIOR FILING DATE: 1997-11-12
? PRIOR APPLICATION NUMBER: 60/055311
? PRIOR FILING DATE: 1997-11-14
? PRIOR APPLICATION NUMBER: 60/066770
? PRIOR FILING DATE: 1997-11-24
? PRIOR APPLICATION NUMBER: 60/075945
? PRIOR FILING DATE: 1998-02-25
? PRIOR APPLICATION NUMBER: 60/078910
? PRIOR FILING DATE: 1998-04-20
? PRIOR APPLICATION NUMBER: 60/083422
? PRIOR FILING DATE: 1998-04-28
? PRIOR APPLICATION NUMBER: 60/084600
? PRIOR FILING DATE: 1998-05-07
? PRIOR APPLICATION NUMBER: 60/087106
? PRIOR FILING DATE: 1998-05-28
? PRIOR APPLICATION NUMBER: 60/087607
? PRIOR FILING DATE: 1998-06-02
? PRIOR APPLICATION NUMBER: 60/087609
? PRIOR FILING DATE: 1998-06-02
? PRIOR APPLICATION NUMBER: 60/087759
? PRIOR FILING DATE: 1998-06-02
? PRIOR APPLICATION NUMBER: 60/087827
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088021
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088025
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088026
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088028
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088029
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088040
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088043
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088226
? PRIOR FILING DATE: 1998-06-04
? PRIOR APPLICATION NUMBER: 60/088167
? PRIOR FILING DATE: 1998-06-05
? PRIOR APPLICATION NUMBER: 60/088202
? PRIOR FILING DATE: 1998-06-05
? PRIOR APPLICATION NUMBER: 60/088212
? PRIOR FILING DATE: 1998-06-05
? PRIOR APPLICATION NUMBER: 60/088217
? PRIOR FILING DATE: 1998-06-05
? PRIOR APPLICATION NUMBER: 60/088655
? PRIOR FILING DATE: 1998-06-09
? PRIOR APPLICATION NUMBER: 60/088734
? PRIOR FILING DATE: 1998-06-10
? PRIOR APPLICATION NUMBER: 60/088748
? PRIOR FILING DATE: 1998-06-10
? PRIOR APPLICATION NUMBER: 60/088742
? PRIOR FILING DATE: 1998-06-10
? PRIOR APPLICATION NUMBER: 60/088810
? PRIOR FILING DATE: 1998-06-10
? PRIOR APPLICATION NUMBER: 60/088824
? PRIOR FILING DATE: 1998-06-10
? PRIOR APPLICATION NUMBER: 60/088826
? PRIOR FILING DATE: 1998-06-10
? PRIOR APPLICATION NUMBER: 60/088858
? PRIOR FILING DATE: 1998-06-11
? PRIOR APPLICATION NUMBER: 60/088861
? PRIOR FILING DATE: 1998-06-11
? PRIOR APPLICATION NUMBER: 60/088876
? PRIOR FILING DATE: 1998-06-11
? PRIOR APPLICATION NUMBER: 60/089105
? PRIOR FILING DATE: 1998-06-12
? PRIOR APPLICATION NUMBER: 60/089440
? PRIOR FILING DATE: 1998-06-16
? PRIOR APPLICATION NUMBER: 60/089512
? PRIOR FILING DATE: 1998-06-16
? PRIOR APPLICATION NUMBER: 60/089514
? PRIOR FILING DATE: 1998-06-16
? PRIOR APPLICATION NUMBER: 60/089532

```

1 PRIOR FILING DATE: 1998-06-17  
 2 PRIOR APPLICATION NUMBER: 60/089548  
 3 PRIOR FILING DATE: 1998-06-17  
 4 PRIOR APPLICATION NUMBER: 60/089508  
 5 PRIOR FILING DATE: 1998-06-17  
 6 PRIOR APPLICATION NUMBER: 60/089599  
 7 PRIOR FILING DATE: 1998-06-17  
 8 PRIOR APPLICATION NUMBER: 60/089600  
 9 PRIOR FILING DATE: 1998-06-17  
 10 PRIOR APPLICATION NUMBER: 60/089653  
 11 PRIOR FILING DATE: 1998-06-17  
 12 PRIOR APPLICATION NUMBER: 60/089801  
 13 PRIOR FILING DATE: 1998-06-18  
 14 PRIOR APPLICATION NUMBER: 60/089907  
 15 PRIOR FILING DATE: 1998-06-18  
 16 PRIOR APPLICATION NUMBER: 60/089908  
 17 PRIOR FILING DATE: 1998-06-18  
 18 PRIOR APPLICATION NUMBER: 60/089947  
 19 PRIOR FILING DATE: 1998-06-19  
 20 PRIOR APPLICATION NUMBER: 60/089948  
 21 PRIOR FILING DATE: 1998-06-19  
 22 PRIOR APPLICATION NUMBER: 60/089952  
 23 PRIOR FILING DATE: 1998-06-19  
 24 PRIOR APPLICATION NUMBER: 60/090246  
 25 PRIOR FILING DATE: 1998-06-22  
 26 PRIOR APPLICATION NUMBER: 60/090252  
 27 PRIOR FILING DATE: 1998-06-22  
 28 PRIOR APPLICATION NUMBER: 60/090254  
 29 PRIOR FILING DATE: 1998-06-22  
 30 PRIOR APPLICATION NUMBER: 60/090449  
 31 PRIOR FILING DATE: 1998-06-24  
 32 PRIOR APPLICATION NUMBER: 60/090455  
 33 PRIOR FILING DATE: 1998-06-24  
 34 PRIOR APPLICATION NUMBER: 60/090429  
 35 PRIOR FILING DATE: 1998-06-24  
 36 PRIOR APPLICATION NUMBER: 60/090431  
 37 PRIOR FILING DATE: 1998-06-24  
 38 PRIOR APPLICATION NUMBER: 60/090435  
 39 PRIOR FILING DATE: 1998-06-24  
 40 PRIOR APPLICATION NUMBER: 60/090444  
 41 PRIOR FILING DATE: 1998-06-24  
 42 PRIOR APPLICATION NUMBER: 60/090445  
 43 PRIOR FILING DATE: 1998-06-24  
 44 PRIOR APPLICATION NUMBER: 60/090472  
 45 PRIOR FILING DATE: 1998-06-24  
 46 PRIOR APPLICATION NUMBER: 60/090545  
 47 PRIOR FILING DATE: 1998-06-24  
 48 PRIOR APPLICATION NUMBER: 60/090676  
 49 PRIOR FILING DATE: 1998-06-25  
 50 PRIOR APPLICATION NUMBER: 60/090678  
 51 PRIOR FILING DATE: 1998-06-25  
 52 PRIOR APPLICATION NUMBER: 60/090690  
 53 PRIOR FILING DATE: 1998-06-25  
 54 PRIOR APPLICATION NUMBER: 60/090694  
 55 PRIOR FILING DATE: 1998-06-25  
 56 PRIOR APPLICATION NUMBER: 60/090695  
 57 PRIOR FILING DATE: 1998-06-25  
 58 PRIOR APPLICATION NUMBER: 60/090696  
 59 PRIOR FILING DATE: 1998-06-25  
 60 PRIOR APPLICATION NUMBER: 60/090862  
 61 PRIOR FILING DATE: 1998-06-26  
 62 PRIOR APPLICATION NUMBER: 60/090864  
 63 PRIOR FILING DATE: 1998-06-26  
 64 PRIOR APPLICATION NUMBER: 60/091460  
 65 PRIOR FILING DATE: 1998-07-01  
 66 PRIOR APPLICATION NUMBER: 60/091478  
 67 PRIOR FILING DATE: 1998-07-02

1 PRIOR APPLICATION NUMBER: 60/091544  
 2 PRIOR FILING DATE: 1998-07-01  
 3 PRIOR APPLICATION NUMBER: 60/091519  
 4 PRIOR FILING DATE: 1998-07-02  
 5 PRIOR APPLICATION NUMBER: 60/091626  
 6 PRIOR FILING DATE: 1998-07-02  
 7 PRIOR APPLICATION NUMBER: 60/091633  
 8 PRIOR FILING DATE: 1998-07-02  
 9 PRIOR APPLICATION NUMBER: 60/091978  
 10 PRIOR FILING DATE: 1998-07-07  
 11 PRIOR APPLICATION NUMBER: 60/091982  
 12 PRIOR FILING DATE: 1998-07-07  
 13 PRIOR APPLICATION NUMBER: 60/092182  
 14 PRIOR FILING DATE: 1998-07-09

Query Match: 63.88; Score: 13.4; DB: 9; Length: 21;  
 Best Local Similarity: 93.48; Pred. No.: 2.0003;

Matches: 14; Conserved: 0; Mismatches: 1; Indels: 0; Gaps: 0;

QY 2 ACCAATGGAGGCG 16

DB 11111111111111111111

DB 4 ACCAATGGAGGCG 17

# RESULT 14

US-09-900-438 428  
 Sequence 428, Application No. US/09990438  
 Publication No. US2003002754A1  
 GENERAL INFORMATION:  
 1 APPLICANT: Ashkenazi, Avi J.  
 2 APPLICANT: Baker, Kevin P.  
 3 APPLICANT: Bodstein, David  
 4 APPLICANT: Desnoyers, Luc  
 5 APPLICANT: Eaton, Dan L.  
 6 APPLICANT: Ferrara, Napoleone  
 7 APPLICANT: Fond, Sherman  
 8 APPLICANT: Gerber, Hanspeter  
 9 APPLICANT: Gottlieb, Mary E.  
 10 APPLICANT: Gubbard, Audrey  
 11 APPLICANT: Gadowski, Paul J.  
 12 APPLICANT: Gilmadi, John Christopher  
 13 APPLICANT: Gurney, Austin L.  
 14 APPLICANT: Klapins, Leah J.  
 15 APPLICANT: Napier, Mary A.  
 16 APPLICANT: Pan, James  
 17 APPLICANT: Paoletti, Nicholas F.  
 18 APPLICANT: Roy, Margaret Ann  
 19 APPLICANT: Stewart, Timothy A.  
 20 APPLICANT: Thomas, Daniel  
 21 APPLICANT: Watanabe, Colin K.  
 22 APPLICANT: Williams, P. Mickey  
 23 APPLICANT: Wood, William L.  
 24 APPLICANT: Zhan, Zemin  
 25 TITLE OF INVENTION: Sorted and Transmembrane Polypeptides and Nucleic  
 26 FILE OF INVENTION: Amino Acids Encoding the Same  
 27 FILE REFERENCE: 127 copies  
 28 CURRENT APPLICATION NUMBER: US/09/900,438  
 29 CURRENT FILING DATE: 2001-11-14  
 30 PRIOR APPLICATION NUMBER: 60/049787  
 31 PRIOR FILING DATE: 1997-06-16  
 32 PRIOR APPLICATION NUMBER: 60/062250  
 33 PRIOR FILING DATE: 1997-10-17  
 34 PRIOR APPLICATION NUMBER: 60/065186  
 35 PRIOR FILING DATE: 1997-11-12  
 36 PRIOR APPLICATION NUMBER: 60/065311  
 37 PRIOR FILING DATE: 1997-11-14  
 38 PRIOR APPLICATION NUMBER: 60/066770  
 39 PRIOR FILING DATE: 1997-11-24  
 40 PRIOR APPLICATION NUMBER: 60/075945  
 41 PRIOR FILING DATE: 1998-02-25  
 42 PRIOR APPLICATION NUMBER: 60/078910  
 43 PRIOR FILING DATE: 1998-03-26  
 44 PRIOR APPLICATION NUMBER: 60/083322

1 PRIOR FILING DATE: 1998-04-28  
2 PRIOR APPLICATION NUMBER: 60/084600  
3 PRIOR FILING DATE: 1998-05-07  
4 PRIOR APPLICATION NUMBER: 60/087106  
5 PRIOR FILING DATE: 1998-05-28  
6 PRIOR APPLICATION NUMBER: 60/087607  
7 PRIOR FILING DATE: 1998-06-02  
8 PRIOR APPLICATION NUMBER: 60/087609  
9 PRIOR FILING DATE: 1998-06-02  
10 PRIOR APPLICATION NUMBER: 60/087759  
11 PRIOR FILING DATE: 1998-06-02  
12 PRIOR APPLICATION NUMBER: 60/087827  
13 PRIOR FILING DATE: 1998-06-04  
14 PRIOR APPLICATION NUMBER: 60/088021  
15 PRIOR FILING DATE: 1998-06-04  
16 PRIOR APPLICATION NUMBER: 60/088025  
17 PRIOR FILING DATE: 1998-06-04  
18 PRIOR APPLICATION NUMBER: 60/088026  
19 PRIOR FILING DATE: 1998-06-04  
20 PRIOR APPLICATION NUMBER: 60/088024  
21 PRIOR FILING DATE: 1998-06-04  
22 PRIOR APPLICATION NUMBER: 60/088029  
23 PRIOR FILING DATE: 1998-06-04  
24 PRIOR APPLICATION NUMBER: 60/088030  
25 PRIOR FILING DATE: 1998-06-04  
26 PRIOR APPLICATION NUMBER: 60/088033  
27 PRIOR FILING DATE: 1998-06-04  
28 PRIOR APPLICATION NUMBER: 60/088426  
29 PRIOR FILING DATE: 1998-06-04  
30 PRIOR APPLICATION NUMBER: 60/088167  
31 PRIOR FILING DATE: 1998-06-05  
32 PRIOR APPLICATION NUMBER: 60/088402  
33 PRIOR FILING DATE: 1998-06-05  
34 PRIOR APPLICATION NUMBER: 60/088212  
35 PRIOR FILING DATE: 1998-06-05  
36 PRIOR APPLICATION NUMBER: 60/088217  
37 PRIOR FILING DATE: 1998-06-05  
38 PRIOR APPLICATION NUMBER: 60/088655  
39 PRIOR FILING DATE: 1998-06-09  
40 PRIOR APPLICATION NUMBER: 60/088744  
41 PRIOR FILING DATE: 1998-06-10  
42 PRIOR APPLICATION NUMBER: 60/088748  
43 PRIOR FILING DATE: 1998-06-10  
44 PRIOR APPLICATION NUMBER: 60/088742  
45 PRIOR FILING DATE: 1998-06-10  
46 PRIOR APPLICATION NUMBER: 60/088810  
47 PRIOR FILING DATE: 1998-06-10  
48 PRIOR APPLICATION NUMBER: 60/088824  
49 PRIOR FILING DATE: 1998-06-10  
50 PRIOR APPLICATION NUMBER: 60/088826  
51 PRIOR FILING DATE: 1998-06-10  
52 PRIOR APPLICATION NUMBER: 60/088858  
53 PRIOR FILING DATE: 1998-06-11  
54 PRIOR APPLICATION NUMBER: 60/088861  
55 PRIOR FILING DATE: 1998-06-11  
56 PRIOR APPLICATION NUMBER: 60/088876  
57 PRIOR FILING DATE: 1998-06-11  
58 PRIOR APPLICATION NUMBER: 60/089105  
59 PRIOR FILING DATE: 1998-06-12  
60 PRIOR APPLICATION NUMBER: 60/089440  
61 PRIOR FILING DATE: 1998-06-16  
62 PRIOR APPLICATION NUMBER: 60/089512  
63 PRIOR FILING DATE: 1998-06-16  
64 PRIOR APPLICATION NUMBER: 60/089514  
65 PRIOR FILING DATE: 1998-06-16  
66 PRIOR APPLICATION NUMBER: 60/089542  
67 PRIOR FILING DATE: 1998-06-17  
68 PRIOR APPLICATION NUMBER: 60/089548  
69 PRIOR FILING DATE: 1998-06-17  
70 PRIOR APPLICATION NUMBER: 60/089598  
71 PRIOR FILING DATE: 1998-06-17  
72 PRIOR APPLICATION NUMBER: 60/089599  
73 PRIOR FILING DATE: 1998-06-17  
74 PRIOR APPLICATION NUMBER: 60/089600  
75 PRIOR FILING DATE: 1998-06-17  
76 PRIOR APPLICATION NUMBER: 60/089653  
77 PRIOR FILING DATE: 1998-06-17  
78 PRIOR APPLICATION NUMBER: 60/089801  
79 PRIOR FILING DATE: 1998-06-18  
80 PRIOR APPLICATION NUMBER: 60/089907  
81 PRIOR FILING DATE: 1998-06-18  
82 PRIOR APPLICATION NUMBER: 60/089908  
83 PRIOR FILING DATE: 1998-06-18  
84 PRIOR APPLICATION NUMBER: 60/089947  
85 PRIOR FILING DATE: 1998-06-19  
86 PRIOR APPLICATION NUMBER: 60/089948  
87 PRIOR FILING DATE: 1998-06-19  
88 PRIOR APPLICATION NUMBER: 60/089952  
89 PRIOR FILING DATE: 1998-06-19  
90 PRIOR APPLICATION NUMBER: 60/090246  
91 PRIOR FILING DATE: 1998-06-22  
92 PRIOR APPLICATION NUMBER: 60/090252  
93 PRIOR FILING DATE: 1998-06-22  
94 PRIOR APPLICATION NUMBER: 60/090254  
95 PRIOR FILING DATE: 1998-06-22  
96 PRIOR APPLICATION NUMBER: 60/090349  
97 PRIOR FILING DATE: 1998-06-24  
98 PRIOR APPLICATION NUMBER: 60/090355  
99 PRIOR FILING DATE: 1998-06-24  
100 PRIOR APPLICATION NUMBER: 60/090429  
101 PRIOR FILING DATE: 1998-06-24  
102 PRIOR APPLICATION NUMBER: 60/090441  
103 PRIOR FILING DATE: 1998-06-24  
104 PRIOR APPLICATION NUMBER: 60/090435  
105 PRIOR FILING DATE: 1998-06-24  
106 PRIOR APPLICATION NUMBER: 60/090444  
107 PRIOR FILING DATE: 1998-06-24  
108 PRIOR APPLICATION NUMBER: 60/090445  
109 PRIOR FILING DATE: 1998-06-24  
110 PRIOR APPLICATION NUMBER: 60/090472  
111 PRIOR FILING DATE: 1998-06-24  
112 PRIOR APPLICATION NUMBER: 60/090535  
113 PRIOR FILING DATE: 1998-06-24  
114 PRIOR APPLICATION NUMBER: 60/090540  
115 PRIOR FILING DATE: 1998-06-24  
116 PRIOR APPLICATION NUMBER: 60/090542  
117 PRIOR FILING DATE: 1998-06-24  
118 PRIOR APPLICATION NUMBER: 60/090557  
119 PRIOR FILING DATE: 1998-06-24  
120 PRIOR APPLICATION NUMBER: 60/090676  
121 PRIOR FILING DATE: 1998-06-25  
122 PRIOR APPLICATION NUMBER: 60/090678  
123 PRIOR FILING DATE: 1998-06-25  
124 PRIOR APPLICATION NUMBER: 60/090690  
125 PRIOR FILING DATE: 1998-06-25  
126 PRIOR APPLICATION NUMBER: 60/090694  
127 PRIOR FILING DATE: 1998-06-25  
128 PRIOR APPLICATION NUMBER: 60/090695  
129 PRIOR FILING DATE: 1998-06-25  
130 PRIOR APPLICATION NUMBER: 60/090696  
131 PRIOR FILING DATE: 1998-06-25  
132 PRIOR APPLICATION NUMBER: 60/090862  
133 PRIOR FILING DATE: 1998-06-26  
134 PRIOR APPLICATION NUMBER: 60/090863  
135 PRIOR FILING DATE: 1998-06-26  
136 PRIOR APPLICATION NUMBER: 60/091460  
137 PRIOR FILING DATE: 1998-07-01  
138 PRIOR APPLICATION NUMBER: 60/091478  
139 PRIOR FILING DATE: 1998-07-02  
140 PRIOR APPLICATION NUMBER: 60/091544  
141 PRIOR FILING DATE: 1998-07-01  
142 PRIOR APPLICATION NUMBER: 60/091519  
143 PRIOR FILING DATE: 1998-07-02  
144 PRIOR APPLICATION NUMBER: 60/091626  
145 PRIOR FILING DATE: 1998-07-02  
146 PRIOR APPLICATION NUMBER: 60/091643



2 PRIOR FILING DATE: 1998-06-18  
2 PRIOR APPLICATION NUMBER: 60/089908  
2 PRIOR FILING DATE: 1998-06-18  
2 PRIOR APPLICATION NUMBER: 60/089947  
2 PRIOR FILING DATE: 1998-06-19  
2 PRIOR APPLICATION NUMBER: 60/089948  
2 PRIOR FILING DATE: 1998-06-19  
2 PRIOR APPLICATION NUMBER: 60/089952  
2 PRIOR FILING DATE: 1998-06-19  
2 PRIOR APPLICATION NUMBER: 60/090246  
2 PRIOR FILING DATE: 1998-06-22  
2 PRIOR APPLICATION NUMBER: 60/090252  
2 PRIOR FILING DATE: 1998-06-22  
2 PRIOR APPLICATION NUMBER: 60/090254  
2 PRIOR FILING DATE: 1998-06-22  
2 PRIOR APPLICATION NUMBER: 60/090349  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090355  
2 PRIOR FILING DATE: 1998-06-23  
2 PRIOR APPLICATION NUMBER: 60/090429  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090441  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090435  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090444  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090445  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090472  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090535  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090540  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090542  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090557  
2 PRIOR FILING DATE: 1998-06-24  
2 PRIOR APPLICATION NUMBER: 60/090676  
2 PRIOR FILING DATE: 1998-06-25  
2 PRIOR APPLICATION NUMBER: 60/090678  
2 PRIOR FILING DATE: 1998-06-25  
2 PRIOR APPLICATION NUMBER: 60/090690  
2 PRIOR FILING DATE: 1998-06-25  
2 PRIOR APPLICATION NUMBER: 60/090694  
2 PRIOR FILING DATE: 1998-06-25  
2 PRIOR APPLICATION NUMBER: 60/090695  
2 PRIOR FILING DATE: 1998-06-25  
2 PRIOR APPLICATION NUMBER: 60/090696  
2 PRIOR FILING DATE: 1998-06-25  
2 PRIOR APPLICATION NUMBER: 60/090862  
2 PRIOR FILING DATE: 1998-06-26  
2 PRIOR APPLICATION NUMBER: 60/090863  
2 PRIOR FILING DATE: 1998-06-26  
2 PRIOR APPLICATION NUMBER: 60/091350  
2 PRIOR FILING DATE: 1998-07-01  
2 PRIOR APPLICATION NUMBER: 60/091478  
2 PRIOR FILING DATE: 1998-07-02  
2 PRIOR APPLICATION NUMBER: 60/091544  
2 PRIOR FILING DATE: 1998-07-01  
2 PRIOR APPLICATION NUMBER: 60/091519  
2 PRIOR FILING DATE: 1998-07-02  
2 PRIOR APPLICATION NUMBER: 60/091626  
2 PRIOR FILING DATE: 1998-07-02  
2 PRIOR APPLICATION NUMBER: 60/091633  
2 PRIOR FILING DATE: 1998-07-02  
2 PRIOR APPLICATION NUMBER: 60/091978  
2 PRIOR FILING DATE: 1998-07-07  
2 PRIOR APPLICATION NUMBER: 60/091982  
2 PRIOR FILING DATE: 1998-07-07  
2 PRIOR APPLICATION NUMBER: 60/092182  
2 PRIOR FILING DATE: 1998-07-09

Query Match 63.88; Score 13.4; DB 9; Length 21;  
Best Local Similarity 93.38; Pred. No. 2.4e-03;  
Matches 14; Conservative 0; Mismatches 1; Gaps 0;

QY 2 ACCAATGGAGGCG 16  
DB 3 ACCAATGGAGGCG 17

RESULT 16

US-09-997-428-428  
Sequence 428, Application US/0997428  
Publication No. US2003027142A1  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Besenoyers, Luc  
APPLICANT: Eaton, Dan L.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Ford, Sherman  
APPLICANT: Gerber, Hanspeter  
APPLICANT: Gottfries, Mary E.  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, J. Christopher  
APPLICANT: Gursoy, Austin L.  
APPLICANT: Kijavits, Ivar J.  
APPLICANT: Napier, Mary A.  
APPLICANT: Pan, James  
APPLICANT: Pecht, Nicholas F.  
APPLICANT: Roy, Margaret Ann  
APPLICANT: Stewart, Timothy A.  
APPLICANT: Lomas, Daniel  
APPLICANT: Katanabe, Colin K.  
APPLICANT: Williams, S. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleo-  
TIDE OF INVENTION: 127301144  
FILE REFERENCE: 127301144  
CURRENT APPLICATION NUMBER: US/09/997,428  
CURRENT FILING DATE: 2001-11-15  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/065186  
PRIOR FILING DATE: 1997-11-12  
PRIOR APPLICATION NUMBER: 60/065411  
PRIOR FILING DATE: 1997-11-14  
PRIOR APPLICATION NUMBER: 60/066770  
PRIOR FILING DATE: 1997-11-24  
PRIOR APPLICATION NUMBER: 60/075945  
PRIOR FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/078910  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/084422  
PRIOR FILING DATE: 1998-04-28  
PRIOR APPLICATION NUMBER: 60/084600  
PRIOR FILING DATE: 1998-05-07  
PRIOR APPLICATION NUMBER: 60/087106  
PRIOR FILING DATE: 1998-05-28  
PRIOR APPLICATION NUMBER: 60/087607  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087609  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087759  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087827  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088021

|    |                           |            |    |                           |            |
|----|---------------------------|------------|----|---------------------------|------------|
| 2  | PRIOR FILING DATE:        | 1998-06-04 | 2  | PRIOR APPLICATION NUMBER: | 60/090495  |
| 3  | PRIOR FILING DATE:        | 1998-06-04 | 3  | PRIOR FILING DATE:        | 1998-06-19 |
| 4  | PRIOR FILING DATE:        | 1998-06-04 | 4  | PRIOR APPLICATION NUMBER: | 60/090496  |
| 5  | PRIOR FILING DATE:        | 1998-06-04 | 5  | PRIOR FILING DATE:        | 1998-06-22 |
| 6  | PRIOR FILING DATE:        | 1998-06-04 | 6  | PRIOR APPLICATION NUMBER: | 60/090497  |
| 7  | PRIOR FILING DATE:        | 1998-06-04 | 7  | PRIOR FILING DATE:        | 1998-06-22 |
| 8  | PRIOR APPLICATION NUMBER: | 60/090498  | 8  | PRIOR APPLICATION NUMBER: | 60/090499  |
| 9  | PRIOR FILING DATE:        | 1998-06-04 | 9  | PRIOR FILING DATE:        | 1998-06-22 |
| 10 | PRIOR FILING DATE:        | 1998-06-04 | 10 | PRIOR APPLICATION NUMBER: | 60/090500  |
| 11 | PRIOR FILING DATE:        | 1998-06-04 | 11 | PRIOR FILING DATE:        | 1998-06-22 |
| 12 | PRIOR APPLICATION NUMBER: | 60/090501  | 12 | PRIOR APPLICATION NUMBER: | 60/090502  |
| 13 | PRIOR FILING DATE:        | 1998-06-04 | 13 | PRIOR FILING DATE:        | 1998-06-22 |
| 14 | PRIOR FILING DATE:        | 1998-06-04 | 14 | PRIOR APPLICATION NUMBER: | 60/090503  |
| 15 | PRIOR FILING DATE:        | 1998-06-04 | 15 | PRIOR FILING DATE:        | 1998-06-22 |
| 16 | PRIOR APPLICATION NUMBER: | 60/090504  | 16 | PRIOR APPLICATION NUMBER: | 60/090505  |
| 17 | PRIOR FILING DATE:        | 1998-06-04 | 17 | PRIOR FILING DATE:        | 1998-06-22 |
| 18 | PRIOR FILING DATE:        | 1998-06-04 | 18 | PRIOR APPLICATION NUMBER: | 60/090506  |
| 19 | PRIOR FILING DATE:        | 1998-06-04 | 19 | PRIOR FILING DATE:        | 1998-06-22 |
| 20 | PRIOR APPLICATION NUMBER: | 60/090507  | 20 | PRIOR APPLICATION NUMBER: | 60/090508  |
| 21 | PRIOR FILING DATE:        | 1998-06-04 | 21 | PRIOR FILING DATE:        | 1998-06-22 |
| 22 | PRIOR FILING DATE:        | 1998-06-04 | 22 | PRIOR APPLICATION NUMBER: | 60/090509  |
| 23 | PRIOR FILING DATE:        | 1998-06-04 | 23 | PRIOR FILING DATE:        | 1998-06-22 |
| 24 | PRIOR APPLICATION NUMBER: | 60/090510  | 24 | PRIOR APPLICATION NUMBER: | 60/090511  |
| 25 | PRIOR FILING DATE:        | 1998-06-04 | 25 | PRIOR FILING DATE:        | 1998-06-22 |
| 26 | PRIOR FILING DATE:        | 1998-06-04 | 26 | PRIOR APPLICATION NUMBER: | 60/090512  |
| 27 | PRIOR FILING DATE:        | 1998-06-04 | 27 | PRIOR FILING DATE:        | 1998-06-22 |
| 28 | PRIOR APPLICATION NUMBER: | 60/090513  | 28 | PRIOR APPLICATION NUMBER: | 60/090514  |
| 29 | PRIOR FILING DATE:        | 1998-06-04 | 29 | PRIOR FILING DATE:        | 1998-07-01 |
| 30 | PRIOR FILING DATE:        | 1998-06-16 | 30 | PRIOR APPLICATION NUMBER: | 60/090515  |
| 31 | PRIOR FILING DATE:        | 1998-06-16 | 31 | PRIOR FILING DATE:        | 1998-07-02 |
| 32 | PRIOR FILING DATE:        | 1998-06-16 | 32 | PRIOR APPLICATION NUMBER: | 60/090516  |
| 33 | PRIOR FILING DATE:        | 1998-06-16 | 33 | PRIOR FILING DATE:        | 1998-07-03 |
| 34 | PRIOR APPLICATION NUMBER: | 60/090517  | 34 | PRIOR APPLICATION NUMBER: | 60/090518  |
| 35 | PRIOR FILING DATE:        | 1998-06-16 | 35 | PRIOR FILING DATE:        | 1998-07-03 |
| 36 | PRIOR FILING DATE:        | 1998-06-16 | 36 | PRIOR APPLICATION NUMBER: | 60/090519  |
| 37 | PRIOR FILING DATE:        | 1998-06-16 | 37 | PRIOR FILING DATE:        | 1998-07-03 |
| 38 | PRIOR APPLICATION NUMBER: | 60/090520  | 38 | PRIOR APPLICATION NUMBER: | 60/090521  |
| 39 | PRIOR FILING DATE:        | 1998-06-16 | 39 | PRIOR FILING DATE:        | 1998-07-03 |
| 40 | PRIOR FILING DATE:        | 1998-06-16 | 40 | PRIOR APPLICATION NUMBER: | 60/090522  |
| 41 | PRIOR FILING DATE:        | 1998-06-16 | 41 | PRIOR FILING DATE:        | 1998-07-03 |
| 42 | PRIOR APPLICATION NUMBER: | 60/090523  | 42 | PRIOR APPLICATION NUMBER: | 60/090524  |
| 43 | PRIOR FILING DATE:        | 1998-06-16 | 43 | PRIOR FILING DATE:        | 1998-07-03 |
| 44 | PRIOR FILING DATE:        | 1998-06-16 | 44 | PRIOR APPLICATION NUMBER: | 60/090525  |
| 45 | PRIOR FILING DATE:        | 1998-06-16 | 45 | PRIOR FILING DATE:        | 1998-07-03 |
| 46 | PRIOR APPLICATION NUMBER: | 60/090526  | 46 | PRIOR APPLICATION NUMBER: | 60/090527  |
| 47 | PRIOR FILING DATE:        | 1998-06-16 | 47 | PRIOR FILING DATE:        | 1998-07-03 |
| 48 | PRIOR FILING DATE:        | 1998-06-16 | 48 | PRIOR APPLICATION NUMBER: | 60/090528  |
| 49 | PRIOR FILING DATE:        | 1998-06-16 | 49 | PRIOR FILING DATE:        | 1998-07-03 |
| 50 | PRIOR APPLICATION NUMBER: | 60/090529  | 50 | PRIOR APPLICATION NUMBER: | 60/090530  |
| 51 | PRIOR FILING DATE:        | 1998-06-16 | 51 | PRIOR FILING DATE:        | 1998-07-03 |
| 52 | PRIOR FILING DATE:        | 1998-06-16 | 52 | PRIOR APPLICATION NUMBER: | 60/090531  |
| 53 | PRIOR FILING DATE:        | 1998-06-16 | 53 | PRIOR FILING DATE:        | 1998-07-03 |
| 54 | PRIOR APPLICATION NUMBER: | 60/090532  | 54 | PRIOR APPLICATION NUMBER: | 60/090533  |
| 55 | PRIOR FILING DATE:        | 1998-06-16 | 55 | PRIOR FILING DATE:        | 1998-07-03 |
| 56 | PRIOR FILING DATE:        | 1998-06-16 | 56 | PRIOR APPLICATION NUMBER: | 60/090534  |
| 57 | PRIOR FILING DATE:        | 1998-06-16 | 57 | PRIOR FILING DATE:        | 1998-07-03 |
| 58 | PRIOR APPLICATION NUMBER: | 60/090535  | 58 | PRIOR APPLICATION NUMBER: | 60/090536  |
| 59 | PRIOR FILING DATE:        | 1998-06-16 | 59 | PRIOR FILING DATE:        | 1998-07-03 |
| 60 | PRIOR FILING DATE:        | 1998-06-16 | 60 | PRIOR APPLICATION NUMBER: | 60/090537  |
| 61 | PRIOR FILING DATE:        | 1998-06-16 | 61 | PRIOR FILING DATE:        | 1998-07-03 |
| 62 | PRIOR APPLICATION NUMBER: | 60/090538  | 62 | PRIOR APPLICATION NUMBER: | 60         |



10b 4 ACAAAGGCAAGTAC 17

RESULT 17

? Sequence 428, Application US/09997666

? Publication No. US20040027167A1

? GENERAL INFORMATION:

? APPLICANT: Ashkenazi, Avi J.

? APPLICANT: Baker, Kevin P.

? APPLICANT: Botstein, David

? APPLICANT: Besnoyers, Luc

? APPLICANT: Eaton, Dan L.

? APPLICANT: Ferrara, Napoleone

? APPLICANT: Fong, Sherman

? APPLICANT: Gorbet, Hanspeter

? APPLICANT: Gottlisen, Mary E.

? APPLICANT: Goddard, Audrey

? APPLICANT: Godowski, Paul J.

? APPLICANT: Grimaldi, J. Christopher

? APPLICANT: Gurney, Austin L.

? APPLICANT: Kujavinskas, J.

? APPLICANT: Napier, Mary A.

? APPLICANT: Pan, James

? APPLICANT: Paoni, Nicholas F.

? APPLICANT: Roy, Margaret Ann

? APPLICANT: Stewart, Timothy A.

? APPLICANT: Tomas, Daniel

? APPLICANT: Watanabe, Colin K.

? APPLICANT: Williams, P. Mickey

? APPLICANT: Wood, William J.

? APPLICANT: Zhang, Zemin

? TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

? FILE REFERENCE: P2730P1C42

? CURRENT APPLICATION NUMBER: US/09/997,666

? CURRENT FILING DATE: 2001-11-15

? PRIOR APPLICATION NUMBER: 60/049787

? PRIOR FILING DATE: 1997-06-16

? PRIOR APPLICATION NUMBER: 60/062250

? PRIOR FILING DATE: 1997-10-17

? PRIOR APPLICATION NUMBER: 60/065186

? PRIOR FILING DATE: 1997-11-12

? PRIOR APPLICATION NUMBER: 60/065311

? PRIOR FILING DATE: 1997-11-13

? PRIOR APPLICATION NUMBER: 60/066770

? PRIOR FILING DATE: 1997-11-24

? PRIOR APPLICATION NUMBER: 60/075945

? PRIOR FILING DATE: 1998-02-25

? PRIOR APPLICATION NUMBER: 60/078910

? PRIOR FILING DATE: 1998-03-20

? PRIOR APPLICATION NUMBER: 60/083322

? PRIOR FILING DATE: 1998-04-28

? PRIOR APPLICATION NUMBER: 60/084600

? PRIOR FILING DATE: 1998-05-07

? PRIOR APPLICATION NUMBER: 60/087106

? PRIOR FILING DATE: 1998-05-28

? PRIOR APPLICATION NUMBER: 60/087607

? PRIOR FILING DATE: 1998-06-02

? PRIOR APPLICATION NUMBER: 60/087609

? PRIOR FILING DATE: 1998-06-02

? PRIOR APPLICATION NUMBER: 60/087759

? PRIOR FILING DATE: 1998-06-02

? PRIOR APPLICATION NUMBER: 60/087827

? PRIOR FILING DATE: 1998-06-03

? PRIOR APPLICATION NUMBER: 60/088021

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088025

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088026

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088028

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088029

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088030

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088033

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088326

? PRIOR FILING DATE: 1998-06-04

? PRIOR APPLICATION NUMBER: 60/088167

? PRIOR FILING DATE: 1998-06-05

? PRIOR APPLICATION NUMBER: 60/088202

? PRIOR FILING DATE: 1998-06-05

? PRIOR APPLICATION NUMBER: 60/088212

? PRIOR FILING DATE: 1998-06-05

? PRIOR APPLICATION NUMBER: 60/088217

? PRIOR FILING DATE: 1998-06-05

? PRIOR APPLICATION NUMBER: 60/088655

? PRIOR FILING DATE: 1998-06-09

? PRIOR APPLICATION NUMBER: 60/088734

? PRIOR FILING DATE: 1998-06-10

? PRIOR APPLICATION NUMBER: 60/088738

? PRIOR FILING DATE: 1998-06-10

? PRIOR APPLICATION NUMBER: 60/088742

? PRIOR FILING DATE: 1998-06-10

? PRIOR APPLICATION NUMBER: 60/088810

? PRIOR FILING DATE: 1998-06-10

? PRIOR APPLICATION NUMBER: 60/088824

? PRIOR FILING DATE: 1998-06-10

? PRIOR APPLICATION NUMBER: 60/088826

? PRIOR FILING DATE: 1998-06-10

? PRIOR APPLICATION NUMBER: 60/088858

? PRIOR FILING DATE: 1998-06-11

? PRIOR APPLICATION NUMBER: 60/088861

? PRIOR FILING DATE: 1998-06-11

? PRIOR APPLICATION NUMBER: 60/088876

? PRIOR FILING DATE: 1998-06-11

? PRIOR APPLICATION NUMBER: 60/089105

? PRIOR FILING DATE: 1998-06-12

? PRIOR APPLICATION NUMBER: 60/089440

? PRIOR FILING DATE: 1998-06-16

? PRIOR APPLICATION NUMBER: 60/089512

? PRIOR FILING DATE: 1998-06-16

? PRIOR APPLICATION NUMBER: 60/089514

? PRIOR FILING DATE: 1998-06-16

? PRIOR APPLICATION NUMBER: 60/089532

? PRIOR FILING DATE: 1998-06-17

? PRIOR APPLICATION NUMBER: 60/089538

? PRIOR FILING DATE: 1998-06-17

? PRIOR APPLICATION NUMBER: 60/089598

? PRIOR FILING DATE: 1998-06-17

? PRIOR APPLICATION NUMBER: 60/089599

? PRIOR FILING DATE: 1998-06-17

? PRIOR APPLICATION NUMBER: 60/089600

? PRIOR FILING DATE: 1998-06-17

? PRIOR APPLICATION NUMBER: 60/089653

? PRIOR FILING DATE: 1998-06-17

? PRIOR APPLICATION NUMBER: 60/089801

? PRIOR FILING DATE: 1998-06-18

? PRIOR APPLICATION NUMBER: 60/089907

? PRIOR FILING DATE: 1998-06-18

? PRIOR APPLICATION NUMBER: 60/089908

? PRIOR FILING DATE: 1998-06-18

? PRIOR APPLICATION NUMBER: 60/089947

? PRIOR FILING DATE: 1998-06-19

? PRIOR APPLICATION NUMBER: 60/089948

? PRIOR FILING DATE: 1998-06-19

? PRIOR APPLICATION NUMBER: 60/089952

? PRIOR FILING DATE: 1998-06-19

? PRIOR APPLICATION NUMBER: 60/090246

? PRIOR FILING DATE: 1998-06-22

? PRIOR APPLICATION NUMBER: 60/090252

? PRIOR FILING DATE: 1998-06-22

? PRIOR APPLICATION NUMBER: 60/090254

1 PRIOR FILING DATE: 1998-06-22  
 2 PRIOR APPLICATION NUMBER: 60/090449  
 3 PRIOR FILING DATE: 1998-06-23  
 4 PRIOR APPLICATION NUMBER: 60/090455  
 5 PRIOR FILING DATE: 1998-06-24  
 6 PRIOR APPLICATION NUMBER: 60/090429  
 7 PRIOR FILING DATE: 1998-06-24  
 8 PRIOR APPLICATION NUMBER: 60/090441  
 9 PRIOR FILING DATE: 1998-06-24  
 10 PRIOR APPLICATION NUMBER: 60/090445  
 11 PRIOR FILING DATE: 1998-06-24  
 12 PRIOR APPLICATION NUMBER: 60/090444  
 13 PRIOR FILING DATE: 1998-06-24  
 14 PRIOR APPLICATION NUMBER: 60/090445  
 15 PRIOR FILING DATE: 1998-06-24  
 16 PRIOR APPLICATION NUMBER: 60/090472  
 17 PRIOR FILING DATE: 1998-06-24  
 18 PRIOR APPLICATION NUMBER: 60/090455  
 19 PRIOR FILING DATE: 1998-06-24  
 20 PRIOR APPLICATION NUMBER: 60/090440  
 21 PRIOR FILING DATE: 1998-06-24  
 22 PRIOR APPLICATION NUMBER: 60/090442  
 23 PRIOR FILING DATE: 1998-06-24  
 24 PRIOR APPLICATION NUMBER: 60/090557  
 25 PRIOR FILING DATE: 1998-06-24  
 26 PRIOR APPLICATION NUMBER: 60/090676  
 27 PRIOR FILING DATE: 1998-06-25  
 28 PRIOR APPLICATION NUMBER: 60/090678  
 29 PRIOR FILING DATE: 1998-06-25  
 30 PRIOR APPLICATION NUMBER: 60/090630  
 31 PRIOR FILING DATE: 1998-06-25  
 32 PRIOR APPLICATION NUMBER: 60/090694  
 33 PRIOR FILING DATE: 1998-06-25  
 34 PRIOR APPLICATION NUMBER: 60/090635  
 35 PRIOR FILING DATE: 1998-06-25  
 36 PRIOR APPLICATION NUMBER: 60/090696  
 37 PRIOR FILING DATE: 1998-06-25  
 38 PRIOR APPLICATION NUMBER: 60/090862  
 39 PRIOR FILING DATE: 1998-06-26  
 40 PRIOR APPLICATION NUMBER: 60/090863  
 41 PRIOR FILING DATE: 1998-06-26  
 42 PRIOR APPLICATION NUMBER: 60/091500  
 43 PRIOR FILING DATE: 1998-07-01  
 44 PRIOR APPLICATION NUMBER: 60/091478  
 45 PRIOR FILING DATE: 1998-07-02  
 46 PRIOR APPLICATION NUMBER: 60/091544  
 47 PRIOR FILING DATE: 1998-07-01  
 48 PRIOR APPLICATION NUMBER: 60/091519  
 49 PRIOR FILING DATE: 1998-07-02  
 50 PRIOR APPLICATION NUMBER: 60/091626  
 51 PRIOR FILING DATE: 1998-07-02  
 52 PRIOR APPLICATION NUMBER: 60/091633  
 53 PRIOR FILING DATE: 1998-07-02  
 54 PRIOR APPLICATION NUMBER: 60/091978  
 55 PRIOR FILING DATE: 1998-07-07  
 56 PRIOR APPLICATION NUMBER: 60/091982  
 57 PRIOR FILING DATE: 1998-07-07  
 58 PRIOR APPLICATION NUMBER: 60/092182  
 59 PRIOR FILING DATE: 1998-07-09

Query Match 64.8%; Score 13.4; DB 9; Length 21;

Best Local Similarity 93.4%; Prod. No. 2, Acc. 0;

Matches 14; conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 ACCAAAGAGAGAG 16

DB 3 ACCAAAGAGAGAG 17

RESULT 18

US 09,990,711 428

Sequence 428, Application US/09/090711

Publication No. US2003004202A1

1 GENERAL INFORMATION:  
 2 APPLICANT: Ashkenazi, Avi J.  
 3 APPLICANT: Becker, Kevin P.  
 4 APPLICANT: Bodenstein, David  
 5 APPLICANT: Deshayes, Eric  
 6 APPLICANT: Eaton, Ian L.  
 7 APPLICANT: Ferrara, Napoleone  
 8 APPLICANT: Ford, Sherman  
 9 APPLICANT: Gerber, Hanspeter  
 10 APPLICANT: Gottlieb, Mary E.  
 11 APPLICANT: Goddard, Audrey  
 12 APPLICANT: Godowski, Paul J.  
 13 APPLICANT: Grimaldi, Christopher  
 14 APPLICANT: Guiney, Austin L.  
 15 APPLICANT: Kizavio, Izar J.  
 16 APPLICANT: Napier, Mary A.  
 17 APPLICANT: Paul, James  
 18 APPLICANT: Paoletti, Nicholas F.  
 19 APPLICANT: Roy, Margaret Ann  
 20 APPLICANT: Stewart, Timothy A.  
 21 APPLICANT: Tamas, Loriel  
 22 APPLICANT: Watanabe, Colin K.  
 23 APPLICANT: Williams, P. Mickey  
 24 APPLICANT: Wood, William L.  
 25 APPLICANT: Zhand, Zhenb  
 26 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 27 FILE REFERENCE: P27801C2  
 28 CURRENT APPLICATION NUMBER: US/09/990,711  
 29 CURRENT FILING DATE: 2001-11-14  
 30 PRIOR APPLICATION NUMBER: 60/049787  
 31 PRIOR FILING DATE: 1997-06-16  
 32 PRIOR APPLICATION NUMBER: 60/062250  
 33 PRIOR FILING DATE: 1997-10-17  
 34 PRIOR APPLICATION NUMBER: 60/065186  
 35 PRIOR FILING DATE: 1997-11-12  
 36 PRIOR APPLICATION NUMBER: 60/065311  
 37 PRIOR FILING DATE: 1997-11-14  
 38 PRIOR APPLICATION NUMBER: 60/066770  
 39 PRIOR FILING DATE: 1997-11-23  
 40 PRIOR APPLICATION NUMBER: 60/075945  
 41 PRIOR FILING DATE: 1998-02-25  
 42 PRIOR APPLICATION NUMBER: 60/078910  
 43 PRIOR FILING DATE: 1998-03-20  
 44 PRIOR APPLICATION NUMBER: 60/083322  
 45 PRIOR FILING DATE: 1998-04-28  
 46 PRIOR APPLICATION NUMBER: 60/084600  
 47 PRIOR FILING DATE: 1998-05-07  
 48 PRIOR APPLICATION NUMBER: 60/087106  
 49 PRIOR FILING DATE: 1998-05-28  
 50 PRIOR APPLICATION NUMBER: 60/087607  
 51 PRIOR FILING DATE: 1998-06-02  
 52 PRIOR APPLICATION NUMBER: 60/087609  
 53 PRIOR FILING DATE: 1998-06-02  
 54 PRIOR APPLICATION NUMBER: 60/087759  
 55 PRIOR FILING DATE: 1998-06-02  
 56 PRIOR APPLICATION NUMBER: 60/087827  
 57 PRIOR FILING DATE: 1998-06-04  
 58 PRIOR APPLICATION NUMBER: 60/088021  
 59 PRIOR FILING DATE: 1998-06-04  
 60 PRIOR APPLICATION NUMBER: 60/088025  
 61 PRIOR FILING DATE: 1998-06-04  
 62 PRIOR APPLICATION NUMBER: 60/088026  
 63 PRIOR FILING DATE: 1998-06-04  
 64 PRIOR APPLICATION NUMBER: 60/088028  
 65 PRIOR FILING DATE: 1998-06-04  
 66 PRIOR APPLICATION NUMBER: 60/088029  
 67 PRIOR FILING DATE: 1998-06-04  
 68 PRIOR APPLICATION NUMBER: 60/088030  
 69 PRIOR FILING DATE: 1998-06-04  
 70 PRIOR APPLICATION NUMBER: 60/088033  
 71 PRIOR FILING DATE: 1998-06-04  
 72 PRIOR APPLICATION NUMBER: 60/088426



1 APPLICANT: Pond, Sherman  
 2 APPLICANT: Gerber, Hanspeter  
 3 APPLICANT: Gerbitson, Mary E.  
 4 APPLICANT: Goddard, Audrey  
 5 APPLICANT: Godowski, Paul J.  
 6 APPLICANT: Grimaldi, J. Christopher  
 7 APPLICANT: Gurney, Austen L.  
 8 APPLICANT: Klevin, Ivor J.  
 9 APPLICANT: Napier, Mary A.  
 10 APPLICANT: Pate, James  
 11 APPLICANT: Paoletti, Nicholas F.  
 12 APPLICANT: Roy, Margaret Ann  
 13 APPLICANT: Stewart, Timothy A.  
 14 APPLICANT: Thomas, Daniel  
 15 APPLICANT: Watanabe, Colin K.  
 16 APPLICANT: Williams, P. Mickey  
 17 APPLICANT: Wood, William L.  
 18 APPLICANT: Zhang, Zemin  
 19  
 20 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 21  
 22 FILE REFERENCE: P27401760  
 23  
 24 CURRENT APPLICATION NUMBER: US/09/989,726  
 25  
 26 PRIOR FILING DATE: 2001-11-19  
 27 PRIOR APPLICATION NUMBER: 60/049787  
 28 PRIOR FILING DATE: 1997-06-16  
 29 PRIOR APPLICATION NUMBER: 60/062250  
 30 PRIOR FILING DATE: 1997-10-17  
 31 PRIOR APPLICATION NUMBER: 60/065186  
 32 PRIOR FILING DATE: 1997-11-12  
 33 PRIOR APPLICATION NUMBER: 60/065311  
 34 PRIOR FILING DATE: 1997-11-13  
 35 PRIOR APPLICATION NUMBER: 60/066770  
 36 PRIOR FILING DATE: 1997-11-24  
 37 PRIOR APPLICATION NUMBER: 60/075945  
 38 PRIOR FILING DATE: 1998-02-25  
 39 PRIOR APPLICATION NUMBER: 60/078910  
 40 PRIOR FILING DATE: 1998-04-20  
 41 PRIOR APPLICATION NUMBER: 60/083422  
 42 PRIOR FILING DATE: 1998-04-28  
 43 PRIOR APPLICATION NUMBER: 60/084600  
 44 PRIOR FILING DATE: 1998-05-07  
 45 PRIOR APPLICATION NUMBER: 60/087106  
 46 PRIOR FILING DATE: 1998-05-28  
 47 PRIOR APPLICATION NUMBER: 60/087607  
 48 PRIOR FILING DATE: 1998-06-02  
 49 PRIOR APPLICATION NUMBER: 60/087609  
 50 PRIOR FILING DATE: 1998-06-02  
 51 PRIOR APPLICATION NUMBER: 60/087759  
 52 PRIOR FILING DATE: 1998-06-02  
 53 PRIOR APPLICATION NUMBER: 60/087827  
 54 PRIOR FILING DATE: 1998-06-04  
 55 PRIOR APPLICATION NUMBER: 60/088021  
 56 PRIOR FILING DATE: 1998-06-04  
 57 PRIOR APPLICATION NUMBER: 60/088025  
 58 PRIOR FILING DATE: 1998-06-04  
 59 PRIOR APPLICATION NUMBER: 60/088026  
 60 PRIOR FILING DATE: 1998-06-04  
 61 PRIOR APPLICATION NUMBER: 60/088028  
 62 PRIOR FILING DATE: 1998-06-04  
 63 PRIOR APPLICATION NUMBER: 60/088029  
 64 PRIOR FILING DATE: 1998-06-04  
 65 PRIOR APPLICATION NUMBER: 60/088030  
 66 PRIOR FILING DATE: 1998-06-04  
 67 PRIOR APPLICATION NUMBER: 60/088033  
 68 PRIOR FILING DATE: 1998-06-04  
 69 PRIOR APPLICATION NUMBER: 60/088326  
 70 PRIOR FILING DATE: 1998-06-04  
 71 PRIOR APPLICATION NUMBER: 60/088167  
 72 PRIOR FILING DATE: 1998-06-05  
 73 PRIOR APPLICATION NUMBER: 60/088202  
 74 PRIOR FILING DATE: 1998-06-05  
 75 PRIOR APPLICATION NUMBER: 60/088212  
 76 PRIOR FILING DATE: 1998-06-05

1 PRIOR APPLICATION NUMBER: 60/088217  
 2 PRIOR FILING DATE: 1998-06-05  
 3 PRIOR APPLICATION NUMBER: 60/088655  
 4 PRIOR FILING DATE: 1998-06-09  
 5 PRIOR APPLICATION NUMBER: 60/088744  
 6 PRIOR FILING DATE: 1998-06-10  
 7 PRIOR APPLICATION NUMBER: 60/088748  
 8 PRIOR FILING DATE: 1998-06-10  
 9 PRIOR APPLICATION NUMBER: 60/088742  
 10 PRIOR FILING DATE: 1998-06-10  
 11 PRIOR APPLICATION NUMBER: 60/088810  
 12 PRIOR FILING DATE: 1998-06-10  
 13 PRIOR APPLICATION NUMBER: 60/088824  
 14 PRIOR FILING DATE: 1998-06-10  
 15 PRIOR APPLICATION NUMBER: 60/088826  
 16 PRIOR FILING DATE: 1998-06-10  
 17 PRIOR APPLICATION NUMBER: 60/088858  
 18 PRIOR FILING DATE: 1998-06-11  
 19 PRIOR APPLICATION NUMBER: 60/088861  
 20 PRIOR FILING DATE: 1998-06-11  
 21 PRIOR APPLICATION NUMBER: 60/088876  
 22 PRIOR FILING DATE: 1998-06-11  
 23 PRIOR APPLICATION NUMBER: 60/089105  
 24 PRIOR FILING DATE: 1998-06-12  
 25 PRIOR APPLICATION NUMBER: 60/089440  
 26 PRIOR FILING DATE: 1998-06-16  
 27 PRIOR APPLICATION NUMBER: 60/089512  
 28 PRIOR FILING DATE: 1998-06-16  
 29 PRIOR APPLICATION NUMBER: 60/089514  
 30 PRIOR FILING DATE: 1998-06-16  
 31 PRIOR APPLICATION NUMBER: 60/089532  
 32 PRIOR FILING DATE: 1998-06-17  
 33 PRIOR APPLICATION NUMBER: 60/089538  
 34 PRIOR FILING DATE: 1998-06-17  
 35 PRIOR APPLICATION NUMBER: 60/089598  
 36 PRIOR FILING DATE: 1998-06-17  
 37 PRIOR APPLICATION NUMBER: 60/089599  
 38 PRIOR FILING DATE: 1998-06-17  
 39 PRIOR APPLICATION NUMBER: 60/089600  
 40 PRIOR FILING DATE: 1998-06-17  
 41 PRIOR APPLICATION NUMBER: 60/089653  
 42 PRIOR FILING DATE: 1998-06-17  
 43 PRIOR APPLICATION NUMBER: 60/089801  
 44 PRIOR FILING DATE: 1998-06-18  
 45 PRIOR APPLICATION NUMBER: 60/089907  
 46 PRIOR FILING DATE: 1998-06-18  
 47 PRIOR APPLICATION NUMBER: 60/089908  
 48 PRIOR FILING DATE: 1998-06-18  
 49 PRIOR APPLICATION NUMBER: 60/089947  
 50 PRIOR FILING DATE: 1998-06-19  
 51 PRIOR APPLICATION NUMBER: 60/089948  
 52 PRIOR FILING DATE: 1998-06-19  
 53 PRIOR APPLICATION NUMBER: 60/089952  
 54 PRIOR FILING DATE: 1998-06-19  
 55 PRIOR APPLICATION NUMBER: 60/090246  
 56 PRIOR FILING DATE: 1998-06-22  
 57 PRIOR APPLICATION NUMBER: 60/090252  
 58 PRIOR FILING DATE: 1998-06-22  
 59 PRIOR APPLICATION NUMBER: 60/090254  
 60 PRIOR FILING DATE: 1998-06-22  
 61 PRIOR APPLICATION NUMBER: 60/090349  
 62 PRIOR FILING DATE: 1998-06-23  
 63 PRIOR APPLICATION NUMBER: 60/090355  
 64 PRIOR FILING DATE: 1998-06-23  
 65 PRIOR APPLICATION NUMBER: 60/090329  
 66 PRIOR FILING DATE: 1998-06-24  
 67 PRIOR APPLICATION NUMBER: 60/090331  
 68 PRIOR FILING DATE: 1998-06-24  
 69 PRIOR APPLICATION NUMBER: 60/090335  
 70 PRIOR FILING DATE: 1998-06-24  
 71 PRIOR APPLICATION NUMBER: 60/090344  
 72 PRIOR FILING DATE: 1998-06-24  
 73 PRIOR APPLICATION NUMBER: 60/090345  
 74 PRIOR FILING DATE: 1998-06-24





APPLICANT: Watanabe, Colin K.  
APPLICANT: Williams, P. Mickey  
APPLICANT: Wood, William I.  
APPLICANT: Zhang, Zemin  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
TITLE OF INVENTION: Acids Encoding the Same  
FILE REFERENCE: P2740PG28  
CURRENT APPLICATION NUMBER: US/09/998,156  
CURRENT FILING DATE: 2001-11-15  
PRIOR APPLICATION NUMBER: 60/049787  
PRIOR FILING DATE: 1997-06-16  
PRIOR APPLICATION NUMBER: 60/062250  
PRIOR FILING DATE: 1997-10-17  
PRIOR APPLICATION NUMBER: 60/065186  
PRIOR FILING DATE: 1997-11-12  
PRIOR APPLICATION NUMBER: 60/065311  
PRIOR FILING DATE: 1997-11-13  
PRIOR APPLICATION NUMBER: 60/066770  
PRIOR FILING DATE: 1997-11-24  
PRIOR APPLICATION NUMBER: 60/075945  
PRIOR FILING DATE: 1998-02-25  
PRIOR APPLICATION NUMBER: 60/078910  
PRIOR FILING DATE: 1998-03-20  
PRIOR APPLICATION NUMBER: 60/083322  
PRIOR FILING DATE: 1998-04-28  
PRIOR APPLICATION NUMBER: 60/084600  
PRIOR FILING DATE: 1998-05-07  
PRIOR APPLICATION NUMBER: 60/087106  
PRIOR FILING DATE: 1998-05-28  
PRIOR APPLICATION NUMBER: 60/087607  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087609  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087759  
PRIOR FILING DATE: 1998-06-02  
PRIOR APPLICATION NUMBER: 60/087827  
PRIOR FILING DATE: 1998-06-03  
PRIOR APPLICATION NUMBER: 60/088021  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088025  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088026  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088028  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088029  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088030  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088033  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088326  
PRIOR FILING DATE: 1998-06-04  
PRIOR APPLICATION NUMBER: 60/088167  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088202  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088212  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088217  
PRIOR FILING DATE: 1998-06-05  
PRIOR APPLICATION NUMBER: 60/088655  
PRIOR FILING DATE: 1998-06-09  
PRIOR APPLICATION NUMBER: 60/088744  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088738  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088742  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088810  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088824  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088826  
PRIOR FILING DATE: 1998-06-10  
PRIOR APPLICATION NUMBER: 60/088858  
PRIOR FILING DATE: 1998-06-11  
PRIOR APPLICATION NUMBER: 60/088861  
PRIOR FILING DATE: 1998-06-11  
PRIOR APPLICATION NUMBER: 60/088876  
PRIOR FILING DATE: 1998-06-11  
PRIOR APPLICATION NUMBER: 60/089105  
PRIOR FILING DATE: 1998-06-12  
PRIOR APPLICATION NUMBER: 60/089440  
PRIOR FILING DATE: 1998-06-16  
PRIOR APPLICATION NUMBER: 60/089512  
PRIOR FILING DATE: 1998-06-16  
PRIOR APPLICATION NUMBER: 60/089514  
PRIOR FILING DATE: 1998-06-16  
PRIOR APPLICATION NUMBER: 60/089532  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089538  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089598  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089599  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089600  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089653  
PRIOR FILING DATE: 1998-06-17  
PRIOR APPLICATION NUMBER: 60/089801  
PRIOR FILING DATE: 1998-06-18  
PRIOR APPLICATION NUMBER: 60/089907  
PRIOR FILING DATE: 1998-06-18  
PRIOR APPLICATION NUMBER: 60/089908  
PRIOR FILING DATE: 1998-06-18  
PRIOR APPLICATION NUMBER: 60/089947  
PRIOR FILING DATE: 1998-06-19  
PRIOR APPLICATION NUMBER: 60/089948  
PRIOR FILING DATE: 1998-06-19  
PRIOR APPLICATION NUMBER: 60/089952  
PRIOR FILING DATE: 1998-06-19  
PRIOR APPLICATION NUMBER: 60/090246  
PRIOR FILING DATE: 1998-06-22  
PRIOR APPLICATION NUMBER: 60/090252  
PRIOR FILING DATE: 1998-06-22  
PRIOR APPLICATION NUMBER: 60/090254  
PRIOR FILING DATE: 1998-06-22  
PRIOR APPLICATION NUMBER: 60/090349  
PRIOR FILING DATE: 1998-06-23  
PRIOR APPLICATION NUMBER: 60/090355  
PRIOR FILING DATE: 1998-06-23  
PRIOR APPLICATION NUMBER: 60/090429  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090431  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090435  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090444  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090445  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090472  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090535  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090540  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090542  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090557  
PRIOR FILING DATE: 1998-06-24  
PRIOR APPLICATION NUMBER: 60/090676  
PRIOR FILING DATE: 1998-06-25  
PRIOR APPLICATION NUMBER: 60/090678





1 PRIOR FILING DATE: 1998-06-11  
 2 PRIOR APPLICATION NUMBER: 60/089105  
 3 PRIOR FILING DATE: 1998-06-12  
 4 PRIOR APPLICATION NUMBER: 60/089440  
 5 PRIOR FILING DATE: 1998-06-16  
 6 PRIOR APPLICATION NUMBER: 60/089512  
 7 PRIOR FILING DATE: 1998-06-16  
 8 PRIOR APPLICATION NUMBER: 60/089514  
 9 PRIOR FILING DATE: 1998-06-16  
 10 PRIOR APPLICATION NUMBER: 60/089542  
 11 PRIOR FILING DATE: 1998-06-17  
 12 PRIOR APPLICATION NUMBER: 60/089538  
 13 PRIOR FILING DATE: 1998-06-17  
 14 PRIOR APPLICATION NUMBER: 60/089598  
 15 PRIOR FILING DATE: 1998-06-17  
 16 PRIOR APPLICATION NUMBER: 60/089599  
 17 PRIOR FILING DATE: 1998-06-17  
 18 PRIOR APPLICATION NUMBER: 60/089600  
 19 PRIOR FILING DATE: 1998-06-17  
 20 PRIOR APPLICATION NUMBER: 60/089653  
 21 PRIOR FILING DATE: 1998-06-17  
 22 PRIOR APPLICATION NUMBER: 60/089801  
 23 PRIOR FILING DATE: 1998-06-18  
 24 PRIOR APPLICATION NUMBER: 60/089907  
 25 PRIOR FILING DATE: 1998-06-18  
 26 PRIOR APPLICATION NUMBER: 60/089908  
 27 PRIOR FILING DATE: 1998-06-18  
 28 PRIOR APPLICATION NUMBER: 60/089947  
 29 PRIOR FILING DATE: 1998-06-19  
 30 PRIOR APPLICATION NUMBER: 60/089948  
 31 PRIOR FILING DATE: 1998-06-19  
 32 PRIOR APPLICATION NUMBER: 60/089952  
 33 PRIOR FILING DATE: 1998-06-19  
 34 PRIOR APPLICATION NUMBER: 60/090246  
 35 PRIOR FILING DATE: 1998-06-22  
 36 PRIOR APPLICATION NUMBER: 60/090252  
 37 PRIOR FILING DATE: 1998-06-22  
 38 PRIOR APPLICATION NUMBER: 60/090254  
 39 PRIOR FILING DATE: 1998-06-22  
 40 PRIOR APPLICATION NUMBER: 60/090349  
 41 PRIOR FILING DATE: 1998-06-23  
 42 PRIOR APPLICATION NUMBER: 60/090355  
 43 PRIOR FILING DATE: 1998-06-23  
 44 PRIOR APPLICATION NUMBER: 60/090429  
 45 PRIOR FILING DATE: 1998-06-24  
 46 PRIOR APPLICATION NUMBER: 60/090441  
 47 PRIOR FILING DATE: 1998-06-24  
 48 PRIOR APPLICATION NUMBER: 60/090445  
 49 PRIOR FILING DATE: 1998-06-24  
 50 PRIOR APPLICATION NUMBER: 60/090472  
 51 PRIOR FILING DATE: 1998-06-24  
 52 PRIOR APPLICATION NUMBER: 60/090535  
 53 PRIOR FILING DATE: 1998-06-24  
 54 PRIOR APPLICATION NUMBER: 60/090540  
 55 PRIOR FILING DATE: 1998-06-24  
 56 PRIOR APPLICATION NUMBER: 60/090542  
 57 PRIOR FILING DATE: 1998-06-24  
 58 PRIOR APPLICATION NUMBER: 60/090557  
 59 PRIOR FILING DATE: 1998-06-24  
 60 PRIOR APPLICATION NUMBER: 60/090676  
 61 PRIOR FILING DATE: 1998-06-25  
 62 PRIOR APPLICATION NUMBER: 60/090678  
 63 PRIOR FILING DATE: 1998-06-25  
 64 PRIOR APPLICATION NUMBER: 60/090690  
 65 PRIOR FILING DATE: 1998-06-25  
 66 PRIOR APPLICATION NUMBER: 60/090694  
 67 PRIOR FILING DATE: 1998-06-25  
 68 PRIOR APPLICATION NUMBER: 60/090695  
 69 PRIOR FILING DATE: 1998-06-25

70 PRIOR APPLICATION NUMBER: 60/090696  
 71 PRIOR FILING DATE: 1998-06-25  
 72 PRIOR APPLICATION NUMBER: 60/090862  
 73 PRIOR FILING DATE: 1998-06-26  
 74 PRIOR APPLICATION NUMBER: 60/090863  
 75 PRIOR FILING DATE: 1998-06-26  
 76 PRIOR APPLICATION NUMBER: 60/091360  
 77 PRIOR FILING DATE: 1998-07-01  
 78 PRIOR APPLICATION NUMBER: 60/091478  
 79 PRIOR FILING DATE: 1998-07-02  
 80 PRIOR APPLICATION NUMBER: 60/091544  
 81 PRIOR FILING DATE: 1998-07-01  
 82 PRIOR APPLICATION NUMBER: 60/091519  
 83 PRIOR FILING DATE: 1998-07-02  
 84 PRIOR APPLICATION NUMBER: 60/091626  
 85 PRIOR FILING DATE: 1998-07-02  
 86 PRIOR APPLICATION NUMBER: 60/091634  
 87 PRIOR FILING DATE: 1998-07-02  
 88 PRIOR APPLICATION NUMBER: 60/091978  
 89 PRIOR FILING DATE: 1998-07-07  
 90 PRIOR APPLICATION NUMBER: 60/091982  
 91 PRIOR FILING DATE: 1998-07-07  
 92 PRIOR APPLICATION NUMBER: 60/092182  
 93 PRIOR FILING DATE: 1998-07-09  
 94 Query Match 63.88% Score 13.4; 18 10; Length 21;  
 95 Best Local Similarity 93.88% Prod. No. 2 40005; 1; Indexes 0; Gaps 0;  
 96 Matches 14; Conservative 0; Mismatches 1;  
 97 QY 2 ACCAATGAAAGAGCC 16  
 98 111 1111111111  
 99 1b 3 ACCAATGAAAGAGCC 17  
 100  
 101 RESULT 23  
 102 US-09-989-724-428  
 103 Sequence 428; Application US/09989723  
 104 Patent No. US2002072092A1  
 105 GENERAL INFORMATION:  
 106 APPLICANT: Ashkenazi, Avi J.  
 107 APPLICANT: Baker, Kevin P.  
 108 APPLICANT: Botstein, David  
 109 APPLICANT: Bushoyers, Joe  
 110 APPLICANT: Eaton, Dan M.  
 111 APPLICANT: Ferrara, Nazzareno  
 112 APPLICANT: Fount, Sherman  
 113 APPLICANT: Gerber, Hanspeter  
 114 APPLICANT: Gerttison, Mary E.  
 115 APPLICANT: Goddard, Audrey  
 116 APPLICANT: Godowski, Paul J.  
 117 APPLICANT: Grimaldi, Christopher  
 118 APPLICANT: Gutney, Austin L.  
 119 APPLICANT: Kijavits, Vira J.  
 120 APPLICANT: Napier, Mary A.  
 121 APPLICANT: Patti, James  
 122 APPLICANT: Patti, Nicholas F.  
 123 APPLICANT: Roy, Margaret Ann  
 124 APPLICANT: Stewart, Timothy A.  
 125 APPLICANT: Thomas, Daniel  
 126 APPLICANT: Watanabe, Tolin K.  
 127 APPLICANT: Williams, P. Mickey  
 128 APPLICANT: Wood, William L.  
 129 APPLICANT: Zhai, Zemin  
 130 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleo-  
 131 TITLE OF INVENTION: Acids Encoding the Same  
 132 FILE REFERENCE: P27301762  
 133 CURRENT APPLICATION NUMBER: US/09989,723  
 134 CURRENT FILING DATE: 2001-11-19  
 135 PRIOR APPLICATION NUMBER: 60/049787  
 136 PRIOR FILING DATE: 1997-06-16  
 137 PRIOR APPLICATION NUMBER: 60/062250  
 138 PRIOR FILING DATE: 1997-10-17  
 139 PRIOR APPLICATION NUMBER: 60/065186

[illegible]

? PRIOR FILING DATE: 1998-07-01  
 ? PRIOR APPLICATION NUMBER: 60/091478  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091544  
 ? PRIOR FILING DATE: 1998-07-01  
 ? PRIOR APPLICATION NUMBER: 60/091519  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091626  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091633  
 ? PRIOR FILING DATE: 1998-07-02  
 ? PRIOR APPLICATION NUMBER: 60/091978  
 ? PRIOR FILING DATE: 1998-07-07  
 ? PRIOR APPLICATION NUMBER: 60/091982  
 ? PRIOR FILING DATE: 1998-07-07  
 ? PRIOR APPLICATION NUMBER: 60/092182  
 ? PRIOR FILING DATE: 1998-07-09

Query Match 63.8% Score 13.4; DB 10; Length 21;

Best local Similarity 93.4% Pred. No. 2.3e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 ACCAATGCGACGCCC 16

Db 4 ACCAATGCGACGCCC 17

#### RESULT 24

US-09-989-279-428

Sequence 428, Application US/09989279

Patent No. US20020072496A1

GENERAL INFORMATION:

? APPLICANT: Ashkenazi, Avi J.  
 ? APPLICANT: Baker, Kevin P.  
 ? APPLICANT: Bolstein, David  
 ? APPLICANT: Desnoyers, Luc  
 ? APPLICANT: Eaton, Dan L.  
 ? APPLICANT: Ferrara, Napoleone  
 ? APPLICANT: Fong, Sheyman  
 ? APPLICANT: Gerber, Hanspeter  
 ? APPLICANT: Gerritsen, Mary E.  
 ? APPLICANT: Goddard, Audrey  
 ? APPLICANT: Godowski, Paul J.  
 ? APPLICANT: Grimaldi, J. Christopher  
 ? APPLICANT: Garney, Austin L.  
 ? APPLICANT: Kijavins, Ivar J.  
 ? APPLICANT: Napier, Mary A.  
 ? APPLICANT: Pan, James  
 ? APPLICANT: Paoni, Nicholas F.  
 ? APPLICANT: Roy, Margaret Ann  
 ? APPLICANT: Stewart, Timothy A.  
 ? APPLICANT: Tumas, Daniel  
 ? APPLICANT: Watanabe, Colin K.  
 ? APPLICANT: Williams, P. Mickey  
 ? APPLICANT: Wood, William I.  
 ? APPLICANT: Zhang, Zemin  
 ? TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 ? FILE REFERENCE: P27301C56  
 ? CURRENT APPLICATION NUMBER: US/09/989,279  
 ? CURRENT FILING DATE: 2001-11-19  
 ? PRIOR APPLICATION NUMBER: 60/049787  
 ? PRIOR FILING DATE: 1997-06-16  
 ? PRIOR APPLICATION NUMBER: 60/052250  
 ? PRIOR FILING DATE: 1997-10-17  
 ? PRIOR APPLICATION NUMBER: 60/065186  
 ? PRIOR FILING DATE: 1997-11-12  
 ? PRIOR APPLICATION NUMBER: 60/065311  
 ? PRIOR FILING DATE: 1997-11-14  
 ? PRIOR APPLICATION NUMBER: 60/066770  
 ? PRIOR FILING DATE: 1997-11-24  
 ? PRIOR APPLICATION NUMBER: 60/075945  
 ? PRIOR FILING DATE: 1998-02-25

? PRIOR APPLICATION NUMBER: 60/078910  
 ? PRIOR FILING DATE: 1998-04-20  
 ? PRIOR APPLICATION NUMBER: 60/083322  
 ? PRIOR FILING DATE: 1998-04-28  
 ? PRIOR APPLICATION NUMBER: 60/084600  
 ? PRIOR FILING DATE: 1998-05-07  
 ? PRIOR APPLICATION NUMBER: 60/087106  
 ? PRIOR FILING DATE: 1998-05-28  
 ? PRIOR APPLICATION NUMBER: 60/087607  
 ? PRIOR FILING DATE: 1998-06-02  
 ? PRIOR APPLICATION NUMBER: 60/087609  
 ? PRIOR FILING DATE: 1998-06-02  
 ? PRIOR APPLICATION NUMBER: 60/087759  
 ? PRIOR FILING DATE: 1998-06-02  
 ? PRIOR APPLICATION NUMBER: 60/087827  
 ? PRIOR FILING DATE: 1998-06-03  
 ? PRIOR APPLICATION NUMBER: 60/088021  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088025  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088026  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088028  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088029  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088030  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088033  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088326  
 ? PRIOR FILING DATE: 1998-06-04  
 ? PRIOR APPLICATION NUMBER: 60/088167  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088202  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088212  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088217  
 ? PRIOR FILING DATE: 1998-06-05  
 ? PRIOR APPLICATION NUMBER: 60/088655  
 ? PRIOR FILING DATE: 1998-06-09  
 ? PRIOR APPLICATION NUMBER: 60/088734  
 ? PRIOR FILING DATE: 1998-06-10  
 ? PRIOR APPLICATION NUMBER: 60/088738  
 ? PRIOR FILING DATE: 1998-06-10  
 ? PRIOR APPLICATION NUMBER: 60/088742  
 ? PRIOR FILING DATE: 1998-06-10  
 ? PRIOR APPLICATION NUMBER: 60/088810  
 ? PRIOR FILING DATE: 1998-06-10  
 ? PRIOR APPLICATION NUMBER: 60/088824  
 ? PRIOR FILING DATE: 1998-06-10  
 ? PRIOR APPLICATION NUMBER: 60/088826  
 ? PRIOR FILING DATE: 1998-06-10  
 ? PRIOR APPLICATION NUMBER: 60/088858  
 ? PRIOR FILING DATE: 1998-06-11  
 ? PRIOR APPLICATION NUMBER: 60/088861  
 ? PRIOR FILING DATE: 1998-06-11  
 ? PRIOR APPLICATION NUMBER: 60/088876  
 ? PRIOR FILING DATE: 1998-06-11  
 ? PRIOR APPLICATION NUMBER: 60/089105  
 ? PRIOR FILING DATE: 1998-06-12  
 ? PRIOR APPLICATION NUMBER: 60/089440  
 ? PRIOR FILING DATE: 1998-06-16  
 ? PRIOR APPLICATION NUMBER: 60/089512  
 ? PRIOR FILING DATE: 1998-06-16  
 ? PRIOR APPLICATION NUMBER: 60/089514  
 ? PRIOR FILING DATE: 1998-06-16  
 ? PRIOR APPLICATION NUMBER: 60/089532  
 ? PRIOR FILING DATE: 1998-06-17  
 ? PRIOR APPLICATION NUMBER: 60/089538  
 ? PRIOR FILING DATE: 1998-06-17  
 ? PRIOR APPLICATION NUMBER: 60/089598

1 PRIOR FILING DATE: 1998-06-17  
 2 PRIOR APPLICATION NUMBER: 60/089599  
 3 PRIOR FILING DATE: 1998-06-17  
 4 PRIOR APPLICATION NUMBER: 60/089600  
 5 PRIOR FILING DATE: 1998-06-17  
 6 PRIOR APPLICATION NUMBER: 60/089633  
 7 PRIOR FILING DATE: 1998-06-17  
 8 PRIOR APPLICATION NUMBER: 60/089801  
 9 PRIOR FILING DATE: 1998-06-18  
 10 PRIOR APPLICATION NUMBER: 60/089907  
 11 PRIOR FILING DATE: 1998-06-18  
 12 PRIOR APPLICATION NUMBER: 60/089908  
 13 PRIOR FILING DATE: 1998-06-18  
 14 PRIOR APPLICATION NUMBER: 60/089947  
 15 PRIOR FILING DATE: 1998-06-19  
 16 PRIOR APPLICATION NUMBER: 60/089948  
 17 PRIOR FILING DATE: 1998-06-19  
 18 PRIOR APPLICATION NUMBER: 60/089952  
 19 PRIOR FILING DATE: 1998-06-19  
 20 PRIOR APPLICATION NUMBER: 60/090246  
 21 PRIOR FILING DATE: 1998-06-22  
 22 PRIOR APPLICATION NUMBER: 60/090252  
 23 PRIOR FILING DATE: 1998-06-22  
 24 PRIOR APPLICATION NUMBER: 60/090254  
 25 PRIOR FILING DATE: 1998-06-22  
 26 PRIOR APPLICATION NUMBER: 60/090349  
 27 PRIOR FILING DATE: 1998-06-23  
 28 PRIOR APPLICATION NUMBER: 60/090455  
 29 PRIOR FILING DATE: 1998-06-24  
 30 PRIOR APPLICATION NUMBER: 60/090449  
 31 PRIOR FILING DATE: 1998-06-24  
 32 PRIOR APPLICATION NUMBER: 60/090441  
 33 PRIOR FILING DATE: 1998-06-24  
 34 PRIOR APPLICATION NUMBER: 60/090445  
 35 PRIOR FILING DATE: 1998-06-24  
 36 PRIOR APPLICATION NUMBER: 60/090472  
 37 PRIOR FILING DATE: 1998-06-24  
 38 PRIOR APPLICATION NUMBER: 60/090545  
 39 PRIOR FILING DATE: 1998-06-24  
 40 PRIOR APPLICATION NUMBER: 60/090540  
 41 PRIOR FILING DATE: 1998-06-24  
 42 PRIOR APPLICATION NUMBER: 60/090542  
 43 PRIOR FILING DATE: 1998-06-24  
 44 PRIOR APPLICATION NUMBER: 60/090557  
 45 PRIOR FILING DATE: 1998-06-24  
 46 PRIOR APPLICATION NUMBER: 60/090676  
 47 PRIOR FILING DATE: 1998-06-25  
 48 PRIOR APPLICATION NUMBER: 60/090678  
 49 PRIOR FILING DATE: 1998-06-25  
 50 PRIOR APPLICATION NUMBER: 60/090690  
 51 PRIOR FILING DATE: 1998-06-25  
 52 PRIOR APPLICATION NUMBER: 60/090694  
 53 PRIOR FILING DATE: 1998-06-25  
 54 PRIOR APPLICATION NUMBER: 60/090695  
 55 PRIOR FILING DATE: 1998-06-25  
 56 PRIOR APPLICATION NUMBER: 60/090696  
 57 PRIOR FILING DATE: 1998-06-25  
 58 PRIOR APPLICATION NUMBER: 60/090802  
 59 PRIOR FILING DATE: 1998-06-26  
 60 PRIOR APPLICATION NUMBER: 60/090803  
 61 PRIOR FILING DATE: 1998-06-26  
 62 PRIOR APPLICATION NUMBER: 60/091460  
 63 PRIOR FILING DATE: 1998-07-01  
 64 PRIOR APPLICATION NUMBER: 60/091478  
 65 PRIOR FILING DATE: 1998-07-02  
 66 PRIOR APPLICATION NUMBER: 60/091544  
 67 PRIOR FILING DATE: 1998-07-01  
 68 PRIOR APPLICATION NUMBER: 60/091519  
 69 PRIOR FILING DATE: 1998-07-02

1 PRIOR APPLICATION NUMBER: 60/091626  
 2 PRIOR FILING DATE: 1998-07-02  
 3 PRIOR APPLICATION NUMBER: 60/091633  
 4 PRIOR FILING DATE: 1998-07-02  
 5 PRIOR APPLICATION NUMBER: 60/091678  
 6 PRIOR FILING DATE: 1998-07-07  
 7 PRIOR APPLICATION NUMBER: 60/091982  
 8 PRIOR FILING DATE: 1998-07-07  
 9 PRIOR APPLICATION NUMBER: 60/092182  
 10 PRIOR FILING DATE: 1998-07-09

Query Match: 63.88; Score: 13.4; PR: 10; Length: 21;  
 Best Local Similarity: 93.88; Pred. No.: 23004;  
 Matches: 14; Conservative: 0; Mismatches: 1; Indels: 0; Gaps: 0;

QY 2 AAAAAAGGAGGAGG 16  
 DB 3 AAAAAAGGAGGAGG 17

# RESULT 21

US-09-989-127-428  
 1 Sequence: 428; Application: US/09989727  
 2 Patent No.: US20020072497A1  
 3 GENERAL INFORMATION:  
 4 APPLICANT: Ashkenazi, Avi J.  
 5 APPLICANT: Baker, Kevin P.  
 6 APPLICANT: Bernstein, David  
 7 APPLICANT: Eschenoyers, Dan  
 8 APPLICANT: Eaton, Dale L.  
 9 APPLICANT: Fortat, Napoleon  
 10 APPLICANT: Ford, Sherman  
 11 APPLICANT: Gerber, Hanspeter  
 12 APPLICANT: Gottlieb, Mary E.  
 13 APPLICANT: Goddard, Audrey  
 14 APPLICANT: Godowski, Paul J.  
 15 APPLICANT: Grimaldi, Christopher  
 16 APPLICANT: Gurney, Austin L.  
 17 APPLICANT: Klayman, Paul J.  
 18 APPLICANT: Napier, Mary A.  
 19 APPLICANT: Pan, James  
 20 APPLICANT: Pami, Nicholas F.  
 21 APPLICANT: Roy, Margaret Ann  
 22 APPLICANT: Stewart, Timothy A.  
 23 APPLICANT: Tamas, Daniel  
 24 APPLICANT: Watanabe, Goh K.  
 25 APPLICANT: Williams, P. Mickey  
 26 APPLICANT: Wood, William L.  
 27 APPLICANT: Zhant, Zhen  
 28 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
 29 FILE REFERENCE: P27401065  
 30 CURRENT APPLICATION NUMBER: US/09/989,727  
 31 CURRENT FILING DATE: 2001-11-19  
 32 PRIOR APPLICATION NUMBER: 60/049787  
 33 PRIOR FILING DATE: 1997-06-16  
 34 PRIOR APPLICATION NUMBER: 60/062250  
 35 PRIOR FILING DATE: 1997-10-17  
 36 PRIOR APPLICATION NUMBER: 60/065186  
 37 PRIOR FILING DATE: 1997-11-12  
 38 PRIOR APPLICATION NUMBER: 60/065411  
 39 PRIOR FILING DATE: 1997-11-13  
 40 PRIOR APPLICATION NUMBER: 60/066770  
 41 PRIOR FILING DATE: 1997-11-24  
 42 PRIOR APPLICATION NUMBER: 60/071945  
 43 PRIOR FILING DATE: 1998-02-25  
 44 PRIOR APPLICATION NUMBER: 60/078910  
 45 PRIOR FILING DATE: 1998-03-20  
 46 PRIOR APPLICATION NUMBER: 60/084822  
 47 PRIOR FILING DATE: 1998-04-28  
 48 PRIOR APPLICATION NUMBER: 60/084600  
 49 PRIOR FILING DATE: 1998-05-07  
 50 PRIOR APPLICATION NUMBER: 60/087106

1 PRIOR FILING DATE: 1998-05-28  
2 PRIOR APPLICATION NUMBER: 60/087607  
3 PRIOR FILING DATE: 1998-06-02  
4 PRIOR APPLICATION NUMBER: 60/087609  
5 PRIOR FILING DATE: 1998-06-02  
6 PRIOR APPLICATION NUMBER: 60/087759  
7 PRIOR FILING DATE: 1998-06-02  
8 PRIOR APPLICATION NUMBER: 60/087827  
9 PRIOR FILING DATE: 1998-06-03  
10 PRIOR APPLICATION NUMBER: 60/088021  
11 PRIOR FILING DATE: 1998-06-04  
12 PRIOR APPLICATION NUMBER: 60/088025  
13 PRIOR FILING DATE: 1998-06-04  
14 PRIOR APPLICATION NUMBER: 60/088026  
15 PRIOR FILING DATE: 1998-06-04  
16 PRIOR APPLICATION NUMBER: 60/088028  
17 PRIOR FILING DATE: 1998-06-04  
18 PRIOR APPLICATION NUMBER: 60/088029  
19 PRIOR FILING DATE: 1998-06-04  
20 PRIOR APPLICATION NUMBER: 60/088030  
21 PRIOR FILING DATE: 1998-06-04  
22 PRIOR APPLICATION NUMBER: 60/088034  
23 PRIOR FILING DATE: 1998-06-04  
24 PRIOR APPLICATION NUMBER: 60/088326  
25 PRIOR FILING DATE: 1998-06-04  
26 PRIOR APPLICATION NUMBER: 60/088167  
27 PRIOR FILING DATE: 1998-06-05  
28 PRIOR APPLICATION NUMBER: 60/088202  
29 PRIOR FILING DATE: 1998-06-05  
30 PRIOR APPLICATION NUMBER: 60/088212  
31 PRIOR FILING DATE: 1998-06-05  
32 PRIOR APPLICATION NUMBER: 60/088217  
33 PRIOR FILING DATE: 1998-06-05  
34 PRIOR APPLICATION NUMBER: 60/088655  
35 PRIOR FILING DATE: 1998-06-09  
36 PRIOR APPLICATION NUMBER: 60/088734  
37 PRIOR FILING DATE: 1998-06-10  
38 PRIOR APPLICATION NUMBER: 60/088738  
39 PRIOR FILING DATE: 1998-06-10  
40 PRIOR APPLICATION NUMBER: 60/088742  
41 PRIOR FILING DATE: 1998-06-10  
42 PRIOR APPLICATION NUMBER: 60/088810  
43 PRIOR FILING DATE: 1998-06-10  
44 PRIOR APPLICATION NUMBER: 60/088824  
45 PRIOR FILING DATE: 1998-06-10  
46 PRIOR APPLICATION NUMBER: 60/088826  
47 PRIOR FILING DATE: 1998-06-10  
48 PRIOR APPLICATION NUMBER: 60/088858  
49 PRIOR FILING DATE: 1998-06-11  
50 PRIOR APPLICATION NUMBER: 60/088861  
51 PRIOR FILING DATE: 1998-06-11  
52 PRIOR APPLICATION NUMBER: 60/088876  
53 PRIOR FILING DATE: 1998-06-11  
54 PRIOR APPLICATION NUMBER: 60/089105  
55 PRIOR FILING DATE: 1998-06-12  
56 PRIOR APPLICATION NUMBER: 60/089440  
57 PRIOR FILING DATE: 1998-06-16  
58 PRIOR APPLICATION NUMBER: 60/089512  
59 PRIOR FILING DATE: 1998-06-16  
60 PRIOR APPLICATION NUMBER: 60/089514  
61 PRIOR FILING DATE: 1998-06-16  
62 PRIOR APPLICATION NUMBER: 60/089532  
63 PRIOR FILING DATE: 1998-06-17  
64 PRIOR APPLICATION NUMBER: 60/089538  
65 PRIOR FILING DATE: 1998-06-17  
66 PRIOR APPLICATION NUMBER: 60/089598  
67 PRIOR FILING DATE: 1998-06-17  
68 PRIOR APPLICATION NUMBER: 60/089599  
69 PRIOR FILING DATE: 1998-06-17  
70 PRIOR APPLICATION NUMBER: 60/089600  
71 PRIOR FILING DATE: 1998-06-17  
72 PRIOR APPLICATION NUMBER: 60/089654  
73 PRIOR FILING DATE: 1998-06-17  
74 PRIOR APPLICATION NUMBER: 60/091478  
75 PRIOR FILING DATE: 1998-07-01  
76 PRIOR APPLICATION NUMBER: 60/091544  
77 PRIOR FILING DATE: 1998-07-01  
78 PRIOR APPLICATION NUMBER: 60/091519  
79 PRIOR FILING DATE: 1998-07-02  
80 PRIOR APPLICATION NUMBER: 60/091626  
81 PRIOR FILING DATE: 1998-07-02  
82 PRIOR APPLICATION NUMBER: 60/091634  
83 PRIOR FILING DATE: 1998-07-02  
84 PRIOR APPLICATION NUMBER: 60/091978  
85 PRIOR FILING DATE: 1998-07-07  
86 PRIOR APPLICATION NUMBER: 60/091982

;  
; PRIOR FILING DATE: 1998-07-07  
; PRIOR APPLICATION NUMBER: 60/092182  
;  
; PRIOR FILING DATE: 1998-07-09

Query Match: 64.8%; Score: 14.4; DB: 10; Length: 21;  
Best Local Similarity: 94.8%; Prod. No.: 2.8e-04;  
Matches: 14; Conservative: 0; Mismatches: 1; Indels: 0; Gaps: 0;

QY 2 ACCVATGGWAGTGG 16  
DB 3 ACCVATGGWAGTGG 17

Search completed: March 18, 2003, 13:29:19  
Job time : 46.7705 secs









|     |      |      |    |    |                     |                    |       |      |      |    |                    |                    |                    |
|-----|------|------|----|----|---------------------|--------------------|-------|------|------|----|--------------------|--------------------|--------------------|
| 485 | 10.4 | 52.0 | 41 | 9  | US-09-925-664-69    | Sequence 69, Appl  | 458   | 10.2 | 51.0 | 29 | 10                 | US-09-006-298-8    | Sequence 8, Appl-1 |
| 486 | 10.4 | 52.0 | 41 | 9  | US-10-043-473-41    | Sequence 41, Appl  | c 459 | 10.2 | 51.0 | 29 | 10                 | US-09-817-464-20   | Sequence 20, Appl  |
| 487 | 10.4 | 52.0 | 43 | 9  | US-09-747-377-111   | Sequence 111, App  | 460   | 10.2 | 51.0 | 7  | US-08-979-847-61   | Sequence 61, Appl  |                    |
| 488 | 10.4 | 52.0 | 44 | 9  | US-09-925-664-57    | Sequence 57, Appl  | 461   | 10.2 | 51.0 | 40 | US-09-717-4-50A-21 | Sequence 21, Appl  |                    |
| 489 | 10.4 | 52.0 | 44 | 9  | US-09-925-664-71    | Sequence 71, Appl  | c 462 | 10.2 | 51.0 | 31 | US-09-912-263-191  | Sequence 191, App  |                    |
| 490 | 10.4 | 52.0 | 45 | 9  | US-10-012-866-784   | Sequence 784, App  | 463   | 10.2 | 51.0 | 41 | US-09-912-263-446  | Sequence 446, App  |                    |
| 491 | 10.4 | 52.0 | 45 | 9  | US-10-012-866-784   | Sequence 784, App  | 464   | 10.2 | 51.0 | 41 | US-09-912-263-457  | Sequence 457, App  |                    |
| 492 | 10.4 | 52.0 | 45 | 9  | US-09-895-793-784   | Sequence 784, App  | c 465 | 10.2 | 51.0 | 41 | US-09-801-274-762  | Sequence 762, App  |                    |
| 493 | 10.4 | 52.0 | 45 | 9  | US-09-895-793-784   | Sequence 784, App  | c 466 | 10.2 | 51.0 | 41 | US-09-801-274-851  | Sequence 851, App  |                    |
| 494 | 10.4 | 52.0 | 45 | 9  | US-09-895-814-784   | Sequence 784, App  | c 467 | 10.2 | 51.0 | 41 | US-09-801-274-1547 | Sequence 1547, App |                    |
| 495 | 10.4 | 52.0 | 45 | 9  | US-09-895-814-784   | Sequence 784, App  | 468   | 10.2 | 51.0 | 41 | US-09-801-274-1523 | Sequence 1523, App |                    |
| 496 | 10.4 | 52.0 | 45 | 9  | US-10-007-132-11    | Sequence 11, Appl  | 469   | 10.2 | 51.0 | 41 | US-09-801-274-1580 | Sequence 1580, App |                    |
| 497 | 10.4 | 52.0 | 45 | 10 | US-09-765-874A-29   | Sequence 29, Appl  | c 470 | 10.2 | 51.0 | 46 | US-10-007-414-10   | Sequence 10, Appl  |                    |
| 498 | 10.4 | 52.0 | 45 | 10 | US-09-765-874A-30   | Sequence 30, Appl  | c 471 | 10.2 | 51.0 | 46 | US-09-756-186-16   | Sequence 16, Appl  |                    |
| 499 | 10.4 | 52.0 | 45 | 10 | US-09-759-143-784   | Sequence 784, App  | 472   | 10.2 | 51.0 | 46 | US-09-756-186-16   | Sequence 16, Appl  |                    |
| 401 | 10.4 | 52.0 | 45 | 10 | US-09-759-143-784   | Sequence 784, App  | 473   | 10.2 | 51.0 | 46 | US-09-756-186-16   | Sequence 16, Appl  |                    |
| 402 | 10.4 | 52.0 | 45 | 10 | US-09-780-669-784   | Sequence 784, App  | 474   | 10.2 | 51.0 | 46 | US-09-756-186-16   | Sequence 16, Appl  |                    |
| 403 | 10.4 | 52.0 | 45 | 10 | US-09-780-669-784   | Sequence 784, App  | 475   | 10.2 | 51.0 | 46 | US-09-756-186-16   | Sequence 16, Appl  |                    |
| 404 | 10.4 | 52.0 | 45 | 10 | US-09-780-669-784   | Sequence 784, App  | 476   | 10.2 | 51.0 | 46 | US-09-756-186-16   | Sequence 16, Appl  |                    |
| 405 | 10.4 | 52.0 | 45 | 10 | US-09-822-827-784   | Sequence 784, App  | c 477 | 10.2 | 51.0 | 46 | US-10-007-628-10   | Sequence 10, Appl  |                    |
| 406 | 10.4 | 52.0 | 45 | 10 | US-09-822-827-784   | Sequence 784, App  | c 478 | 10.2 | 51.0 | 46 | US-10-007-628-10   | Sequence 10, Appl  |                    |
| 407 | 10.4 | 52.0 | 46 | 10 | US-09-896-650A-1    | Sequence 1, Appl-1 | 479   | 10.2 | 51.0 | 47 | US-10-039-171-1    | Sequence 29, Appl  |                    |
| 408 | 10.4 | 52.0 | 46 | 10 | US-09-896-650A-1    | Sequence 1, Appl-1 | c 480 | 10.2 | 51.0 | 47 | US-10-083-168-29   | Sequence 29, Appl  |                    |
| 409 | 10.4 | 52.0 | 48 | 9  | US-09-864-785-1018  | Sequence 5, Appl-1 | c 481 | 10.2 | 51.0 | 47 | US-09-878-766A-1   | Sequence 1, Appl-1 |                    |
| 410 | 10.4 | 52.0 | 48 | 9  | US-09-864-785-1018  | Sequence 5, Appl-1 | c 482 | 10.2 | 51.0 | 47 | US-09-878-766A-1   | Sequence 1, Appl-1 |                    |
| 411 | 10.4 | 52.0 | 48 | 9  | US-09-864-785-1018  | Sequence 5, Appl-1 | c 483 | 10.2 | 51.0 | 39 | US-09-878-766A-1   | Sequence 1, Appl-1 |                    |
| 412 | 10.2 | 51.0 | 50 | 10 | US-09-223-490-19    | Sequence 3006, App | c 484 | 10.2 | 51.0 | 39 | US-09-921-099-5    | Sequence 5, Appl-1 |                    |
| 413 | 10.2 | 51.0 | 15 | 10 | US-09-504-231A-216  | Sequence 19, Appl  | c 485 | 10.2 | 51.0 | 12 | US-10-051-843-22   | Sequence 22, Appl  |                    |
| 414 | 10.2 | 51.0 | 15 | 10 | US-09-504-231A-216  | Sequence 216, App  | c 486 | 10.2 | 51.0 | 40 | US-10-093-944-5    | Sequence 5, Appl-1 |                    |
| 415 | 10.2 | 51.0 | 17 | 9  | US-09-274-5540-216  | Sequence 216, App  | c 487 | 10.2 | 51.0 | 41 | US-10-093-944-5    | Sequence 5, Appl-1 |                    |
| 416 | 10.2 | 51.0 | 17 | 9  | US-09-274-5540-216  | Sequence 216, App  | c 488 | 10.2 | 51.0 | 41 | US-10-093-944-5    | Sequence 5, Appl-1 |                    |
| 417 | 10.2 | 51.0 | 17 | 9  | US-09-864-785-1579  | Sequence 375, App  | c 489 | 10.2 | 51.0 | 41 | US-09-843-846-7    | Sequence 7, Appl-1 |                    |
| 418 | 10.2 | 51.0 | 17 | 9  | US-09-864-785-1579  | Sequence 375, App  | c 490 | 10.2 | 51.0 | 42 | US-09-843-846-7    | Sequence 7, Appl-1 |                    |
| 419 | 10.2 | 51.0 | 17 | 9  | US-09-864-785-1579  | Sequence 375, App  | c 491 | 10.2 | 51.0 | 44 | US-09-951-622-8    | Sequence 4, Appl-1 |                    |
| 420 | 10.2 | 51.0 | 18 | 9  | US-09-864-785-1579  | Sequence 375, App  | c 492 | 10.2 | 51.0 | 44 | US-09-951-622-8    | Sequence 4, Appl-1 |                    |
| 421 | 10.2 | 51.0 | 19 | 9  | US-09-945-464-12    | Sequence 8322, App | c 493 | 10.2 | 51.0 | 44 | US-09-906-898-225  | Sequence 225, App  |                    |
| 422 | 10.2 | 51.0 | 19 | 9  | US-09-945-464-12    | Sequence 8322, App | c 494 | 10.2 | 51.0 | 44 | US-09-906-898-225  | Sequence 225, App  |                    |
| 423 | 10.2 | 51.0 | 19 | 9  | US-09-945-464-12    | Sequence 8322, App | c 495 | 10.2 | 51.0 | 44 | US-09-907-841-225  | Sequence 225, App  |                    |
| 424 | 10.2 | 51.0 | 20 | 10 | US-09-733-294A-42   | Sequence 42, Appl  | c 496 | 10.2 | 51.0 | 44 | US-09-907-841-225  | Sequence 225, App  |                    |
| 425 | 10.2 | 51.0 | 20 | 10 | US-09-820-587-2     | Sequence 42, Appl  | c 497 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 426 | 10.2 | 51.0 | 20 | 10 | US-09-925-548-85    | Sequence 85, Appl  | c 498 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 427 | 10.2 | 51.0 | 21 | 10 | US-09-868-067-9     | Sequence 67, Appl  | c 499 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 428 | 10.2 | 51.0 | 21 | 10 | US-09-868-067-9     | Sequence 67, Appl  | c 500 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 429 | 10.2 | 51.0 | 22 | 9  | US-09-784-818-15    | Sequence 15, Appl  | c 501 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 430 | 10.2 | 51.0 | 22 | 9  | US-09-784-818-15    | Sequence 15, Appl  | c 502 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 431 | 10.2 | 51.0 | 22 | 10 | US-09-819-522-15    | Sequence 15, Appl  | c 503 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 432 | 10.2 | 51.0 | 22 | 10 | US-09-819-522-15    | Sequence 15, Appl  | c 504 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 433 | 10.2 | 51.0 | 22 | 10 | US-09-757-251-16    | Sequence 16, Appl  | c 505 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 434 | 10.2 | 51.0 | 22 | 10 | US-09-757-251-16    | Sequence 16, Appl  | c 506 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 435 | 10.2 | 51.0 | 22 | 10 | US-09-784-897A-15   | Sequence 15, Appl  | c 507 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 436 | 10.2 | 51.0 | 22 | 10 | US-09-784-897A-15   | Sequence 15, Appl  | c 508 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 437 | 10.2 | 51.0 | 22 | 10 | US-09-828-325A-16   | Sequence 16, Appl  | c 509 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 438 | 10.2 | 51.0 | 22 | 10 | US-09-757-217A-16   | Sequence 16, Appl  | c 510 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 439 | 10.2 | 51.0 | 22 | 10 | US-09-828-259A-16   | Sequence 16, Appl  | c 511 | 10.2 | 51.0 | 44 | US-09-904-859-225  | Sequence 225, App  |                    |
| 440 | 10.2 | 51.0 | 23 | 9  | US-09-930-485-34    | Sequence 34, Appl  | c 512 | 10.2 | 51.0 | 50 | US-09-824-588-3    | Sequence 3, Appl-1 |                    |
| 441 | 10.2 | 51.0 | 23 | 9  | US-09-930-485-34    | Sequence 34, Appl  | c 513 | 10.2 | 51.0 | 50 | US-09-824-588-3    | Sequence 3, Appl-1 |                    |
| 442 | 10.2 | 51.0 | 23 | 9  | US-09-964-261-69    | Sequence 69, Appl  | c 514 | 10.2 | 51.0 | 50 | US-09-824-588-3    | Sequence 3, Appl-1 |                    |
| 443 | 10.2 | 51.0 | 23 | 9  | US-10-023-610-44    | Sequence 44, Appl  | c 515 | 10.2 | 51.0 | 50 | US-09-999-672-28   | Sequence 28, Appl  |                    |
| 444 | 10.2 | 51.0 | 23 | 9  | US-09-779-152-44    | Sequence 44, Appl  | c 516 | 10.2 | 51.0 | 50 | US-09-999-672-28   | Sequence 28, Appl  |                    |
| 445 | 10.2 | 51.0 | 23 | 10 | US-09-860-996-14    | Sequence 14, Appl  | c 517 | 10.2 | 51.0 | 50 | US-10-040-863-25   | Sequence 25, Appl  |                    |
| 446 | 10.2 | 51.0 | 23 | 10 | US-09-860-996-14    | Sequence 14, Appl  | c 518 | 10.2 | 51.0 | 50 | US-10-040-863-25   | Sequence 25, Appl  |                    |
| 447 | 10.2 | 51.0 | 24 | 9  | US-09-964-261-70    | Sequence 70, Appl  | c 519 | 10.2 | 51.0 | 50 | US-09-824-588-3    | Sequence 3, Appl-1 |                    |
| 448 | 10.2 | 51.0 | 24 | 9  | US-09-964-261-70    | Sequence 70, Appl  | c 520 | 10.2 | 51.0 | 50 | US-09-824-588-3    | Sequence 3, Appl-1 |                    |
| 449 | 10.2 | 51.0 | 25 | 9  | US-09-964-261-71    | Sequence 71, Appl  | c 521 | 10.2 | 51.0 | 50 | US-09-824-588-3    | Sequence 3, Appl-1 |                    |
| 450 | 10.2 | 51.0 | 25 | 9  | US-09-964-261-71    | Sequence 71, Appl  | c 522 | 10.2 | 51.0 | 50 | US-09-824-588-3    | Sequence 3, Appl-1 |                    |
| 451 | 10.2 | 51.0 | 25 | 10 | US-09-866-108-4186  | Sequence 4186, App | c 523 | 10.2 | 51.0 | 50 | US-09-866-108-887  | Sequence 887, App  |                    |
| 452 | 10.2 | 51.0 | 25 | 10 | US-09-866-108-14214 | Sequence 14214, A  | c 524 | 10.2 | 51.0 | 50 | US-09-866-108-887  | Sequence 887, App  |                    |
| 453 | 10.2 | 51.0 | 25 | 10 | US-09-866-108-14214 | Sequence 14214, A  | c 525 | 10.2 | 51.0 | 50 | US-09-866-108-887  | Sequence 887, App  |                    |
| 454 | 10.2 | 51.0 | 25 | 10 | US-09-498-399-12    | Sequence 12, Appl  | c 526 | 10.2 | 51.0 | 50 | US-09-866-108-887  | Sequence 887, App  |                    |
| 455 | 10.2 | 51.0 | 28 | 9  | US-09-899-046-66    | Sequence 66, Appl  | c 527 | 10.2 | 51.0 | 50 | US-09-866-108-887  | Sequence 887, App  |                    |
| 456 | 10.2 | 51.0 | 28 | 9  | US-09-899-046-66    | Sequence 66, Appl  | c 528 | 10.2 | 51.0 | 50 | US-09-866-108-887  | Sequence 887, App  |                    |
| 457 | 10.2 | 51.0 | 28 | 10 | US-09-878-281-66    | Sequence 66, Appl  | c 529 | 10.2 | 51.0 | 50 | US-09-866-108-887  | Sequence 887, App  |                    |

|       |    |      |    |    |                     |                    |       |     |      |    |    |                    |                    |
|-------|----|------|----|----|---------------------|--------------------|-------|-----|------|----|----|--------------------|--------------------|
| c 541 | 10 | 50.0 | 21 | 9  | US-09-747-419-4     | Sequence 4, Appl   | 604   | 10  | 50.0 | 31 | 10 | US-09-760-574-20   | Sequence 20, Appl  |
| c 542 | 10 | 50.0 | 21 | 9  | US-10-085-849-7     | Sequence 7, Appl   | c 605 | 10  | 50.0 | 32 | 9  | US-09-876-082-6    | Sequence 6, Appl   |
| c 543 | 10 | 50.0 | 21 | 9  | US-09-421-005A-4    | Sequence 3, Appl   | c 606 | 10  | 50.0 | 32 | 9  | US-09-875-082-6    | Sequence 6, Appl   |
| c 544 | 10 | 50.0 | 21 | 9  | US-10-044-400-11    | Sequence 11, Appl  | c 607 | 10  | 50.0 | 33 | 9  | US-09-918-696-4    | Sequence 4, Appl   |
| c 545 | 10 | 50.0 | 21 | 9  | US-09-765-081-15    | Sequence 15, Appl  | c 608 | 10  | 50.0 | 33 | 9  | US-09-918-696-4    | Sequence 4, Appl   |
| c 546 | 10 | 50.0 | 21 | 10 | US-09-765-081-444   | Sequence 444, Appl | c 609 | 10  | 50.0 | 33 | 9  | US-09-817-519A-29  | Sequence 29, Appl  |
| c 547 | 10 | 50.0 | 23 | 9  | US-09-767-894-1     | Sequence 1, Appl   | c 610 | 10  | 50.0 | 33 | 10 | US-09-760-574-22   | Sequence 22, Appl  |
| c 548 | 10 | 50.0 | 24 | 9  | US-09-754-854A-681  | Sequence 681, App  | c 611 | 10  | 50.0 | 34 | 9  | US-09-789-054A-53  | Sequence 53, Appl  |
| c 549 | 10 | 50.0 | 24 | 10 | US-09-766-478A-31   | Sequence 31, Appl  | c 612 | 10  | 50.0 | 34 | 9  | US-09-922-549B-5   | Sequence 5, Appl   |
| c 540 | 10 | 50.0 | 25 | 8  | US-08-647-444-9     | Sequence 9, Appl   | c 613 | 10  | 50.0 | 36 | 10 | US-09-007-094-17   | Sequence 17, Appl  |
| c 541 | 10 | 50.0 | 25 | 9  | US-09-904-968A-14   | Sequence 14, Appl  | c 614 | 10  | 50.0 | 36 | 10 | US-09-027-287-42   | Sequence 42, Appl  |
| c 542 | 10 | 50.0 | 25 | 9  | US-10-060-840-1072  | Sequence 1072, Ap  | c 615 | 10  | 50.0 | 36 | 10 | US-09-252-656B-42  | Sequence 42, Appl  |
| c 543 | 10 | 50.0 | 25 | 9  | US-10-060-840-1073  | Sequence 1073, Ap  | c 616 | 10  | 50.0 | 36 | 10 | US-09-850-716A-435 | Sequence 435, App  |
| c 544 | 10 | 50.0 | 25 | 9  | US-10-060-840-1074  | Sequence 1074, Ap  | c 617 | 10  | 50.0 | 36 | 10 | US-09-897-778-43   | Sequence 435, App  |
| c 545 | 10 | 50.0 | 25 | 9  | US-10-060-840-1075  | Sequence 1075, Ap  | c 618 | 10  | 50.0 | 37 | 10 | US-09-776-695-20   | Sequence 20, Appl  |
| c 546 | 10 | 50.0 | 25 | 9  | US-10-060-840-1076  | Sequence 1076, Ap  | c 619 | 10  | 50.0 | 38 | 9  | US-09-864-785-1308 | Sequence 1308, Ap  |
| c 547 | 10 | 50.0 | 25 | 9  | US-10-060-840-1077  | Sequence 1077, Ap  | c 620 | 10  | 50.0 | 38 | 9  | US-09-930-125-24   | Sequence 24, Appl  |
| c 548 | 10 | 50.0 | 25 | 9  | US-10-060-840-1078  | Sequence 1078, Ap  | c 621 | 10  | 50.0 | 38 | 10 | US-09-905-842-1    | Sequence 1, Appl   |
| c 549 | 10 | 50.0 | 25 | 9  | US-10-060-840-1079  | Sequence 1079, Ap  | c 622 | 10  | 50.0 | 39 | 9  | US-10-114-170-47   | Sequence 47, Appl  |
| c 550 | 10 | 50.0 | 25 | 10 | US-09-866-108-10974 | Sequence 10974, A  | c 623 | 10  | 50.0 | 39 | 10 | US-09-825-012-17   | Sequence 17, Appl  |
| c 551 | 10 | 50.0 | 25 | 10 | US-09-866-108-10975 | Sequence 10975, A  | c 624 | 10  | 50.0 | 41 | 9  | US-09-925-664-67   | Sequence 67, Appl  |
| c 552 | 10 | 50.0 | 25 | 10 | US-09-866-108-10976 | Sequence 10976, A  | c 625 | 10  | 50.0 | 41 | 10 | US-09-878-454A-19  | Sequence 19, Appl  |
| c 553 | 10 | 50.0 | 25 | 10 | US-09-866-108-10977 | Sequence 10977, A  | c 626 | 10  | 50.0 | 41 | 10 | US-09-557-423-10   | Sequence 10, Appl  |
| c 554 | 10 | 50.0 | 25 | 10 | US-09-866-108-10978 | Sequence 10978, A  | c 627 | 10  | 50.0 | 42 | 9  | US-09-943-722-96   | Sequence 96, Appl  |
| c 555 | 10 | 50.0 | 25 | 10 | US-09-866-108-10979 | Sequence 10979, A  | c 628 | 10  | 50.0 | 42 | 9  | US-09-970-561-5    | Sequence 56, Appl  |
| c 556 | 10 | 50.0 | 25 | 10 | US-09-866-108-10980 | Sequence 10980, A  | c 629 | 10  | 50.0 | 45 | 9  | US-09-975-719-124  | Sequence 124, App  |
| c 557 | 10 | 50.0 | 25 | 10 | US-09-866-108-10981 | Sequence 10981, A  | c 630 | 10  | 50.0 | 45 | 9  | US-09-905-291A-370 | Sequence 370, App  |
| c 558 | 10 | 50.0 | 25 | 10 | US-09-866-108-13761 | Sequence 13761, A  | c 631 | 10  | 50.0 | 48 | 9  | US-09-916-494A-45  | Sequence 45, Appl  |
| c 559 | 10 | 50.0 | 25 | 10 | US-09-866-108-13762 | Sequence 13762, A  | c 632 | 10  | 50.0 | 48 | 9  | US-09-864-785-3509 | Sequence 3509, App |
| c 560 | 10 | 50.0 | 25 | 10 | US-09-866-108-13763 | Sequence 13763, A  | c 633 | 10  | 50.0 | 48 | 9  | US-09-902-853-370  | Sequence 370, App  |
| c 561 | 10 | 50.0 | 25 | 10 | US-09-866-108-13764 | Sequence 13764, A  | c 634 | 10  | 50.0 | 48 | 9  | US-09-907-824-370  | Sequence 370, App  |
| c 562 | 10 | 50.0 | 25 | 10 | US-09-866-108-13765 | Sequence 13765, A  | c 635 | 10  | 50.0 | 48 | 9  | US-09-907-841-370  | Sequence 370, App  |
| c 563 | 10 | 50.0 | 25 | 10 | US-09-866-108-13766 | Sequence 13766, A  | c 636 | 10  | 50.0 | 48 | 9  | US-09-904-011-370  | Sequence 470, App  |
| c 564 | 10 | 50.0 | 25 | 10 | US-09-866-108-13767 | Sequence 13767, A  | c 637 | 10  | 50.0 | 48 | 9  | US-09-826-115-4    | Sequence 4, Appl   |
| c 565 | 10 | 50.0 | 25 | 10 | US-09-866-108-13768 | Sequence 13768, A  | c 638 | 10  | 50.0 | 48 | 9  | US-09-906-742-370  | Sequence 370, App  |
| c 566 | 10 | 50.0 | 25 | 10 | US-09-866-108-13769 | Sequence 13769, A  | c 639 | 10  | 50.0 | 48 | 9  | US-09-906-838-370  | Sequence 370, App  |
| c 567 | 10 | 50.0 | 25 | 10 | US-09-866-108-13770 | Sequence 13770, A  | c 640 | 10  | 50.0 | 48 | 9  | US-09-907-613-370  | Sequence 370, App  |
| c 568 | 10 | 50.0 | 25 | 10 | US-09-866-108-13771 | Sequence 13771, A  | c 641 | 10  | 50.0 | 48 | 9  | US-09-907-942-370  | Sequence 370, App  |
| c 569 | 10 | 50.0 | 25 | 10 | US-09-866-108-13772 | Sequence 13772, A  | c 642 | 10  | 50.0 | 48 | 9  | US-09-904-820-370  | Sequence 370, App  |
| c 570 | 10 | 50.0 | 25 | 10 | US-09-866-108-13773 | Sequence 13773, A  | c 643 | 10  | 50.0 | 48 | 9  | US-09-904-859-370  | Sequence 370, App  |
| c 571 | 10 | 50.0 | 25 | 10 | US-09-866-108-13774 | Sequence 13774, A  | c 644 | 10  | 50.0 | 48 | 9  | US-09-904-204-370  | Sequence 370, App  |
| c 572 | 10 | 50.0 | 25 | 10 | US-09-866-108-13775 | Sequence 13775, A  | c 645 | 10  | 50.0 | 48 | 9  | US-09-904-786-370  | Sequence 370, App  |
| c 573 | 10 | 50.0 | 25 | 10 | US-09-866-108-13776 | Sequence 13776, A  | c 646 | 10  | 50.0 | 48 | 9  | US-09-906-646-370  | Sequence 370, App  |
| c 574 | 10 | 50.0 | 25 | 10 | US-09-866-108-15478 | Sequence 15478, A  | c 647 | 10  | 50.0 | 48 | 9  | US-09-906-700-370  | Sequence 370, App  |
| c 575 | 10 | 50.0 | 25 | 10 | US-09-866-108-15486 | Sequence 15486, A  | c 648 | 10  | 50.0 | 48 | 9  | US-09-902-903-370  | Sequence 370, App  |
| c 576 | 10 | 50.0 | 25 | 10 | US-09-828-310-30    | Sequence 30, Appl  | c 649 | 10  | 50.0 | 48 | 9  | US-09-903-749A-370 | Sequence 370, App  |
| c 577 | 10 | 50.0 | 25 | 10 | US-09-918-702-19    | Sequence 19, Appl  | c 650 | 10  | 50.0 | 48 | 9  | US-09-903-786-370  | Sequence 370, App  |
| c 578 | 10 | 50.0 | 26 | 8  | US-08-463-404-25    | Sequence 25, Appl  | c 651 | 10  | 50.0 | 48 | 10 | US-09-798-058-20   | Sequence 20, Appl  |
| c 579 | 10 | 50.0 | 26 | 9  | US-09-949-134A-24   | Sequence 24, Appl  | c 652 | 10  | 50.0 | 48 | 10 | US-09-909-320-370  | Sequence 370, App  |
| c 580 | 10 | 50.0 | 26 | 9  | US-09-940-244-416   | Sequence 316, App  | c 653 | 10  | 50.0 | 48 | 10 | US-09-909-088B-470 | Sequence 470, App  |
| c 581 | 10 | 50.0 | 27 | 9  | US-10-158-895-7     | Sequence 7, Appl   | c 654 | 9.8 | 49.0 | 13 | 10 | US-09-747-538-12   | Sequence 12, Appl  |
| c 582 | 10 | 50.0 | 27 | 9  | US-09-997-868-43    | Sequence 43, Appl  | c 655 | 9.8 | 49.0 | 13 | 10 | US-09-747-538-13   | Sequence 13, Appl  |
| c 583 | 10 | 50.0 | 29 | 9  | US-10-117-476-9     | Sequence 9, Appl   | c 656 | 9.8 | 49.0 | 16 | 9  | US-09-904-968A-20  | Sequence 20, Appl  |
| c 584 | 10 | 50.0 | 29 | 9  | US-09-729-658B-41   | Sequence 41, Appl  | c 657 | 9.8 | 49.0 | 17 | 9  | US-09-864-785-6    | Sequence 6, Appl   |
| c 585 | 10 | 50.0 | 29 | 9  | US-10-155-479-4     | Sequence 3, Appl   | c 658 | 9.8 | 49.0 | 17 | 9  | US-09-864-785-2665 | Sequence 2665, App |
| c 586 | 10 | 50.0 | 29 | 10 | US-09-745-764-94    | Sequence 94, Appl  | c 659 | 9.8 | 49.0 | 17 | 9  | US-09-864-785-2666 | Sequence 2666, App |
| c 587 | 10 | 50.0 | 29 | 10 | US-09-899-917-4     | Sequence 4, Appl   | c 660 | 9.8 | 49.0 | 17 | 10 | US-09-866-108-690  | Sequence 690, App  |
| c 588 | 10 | 50.0 | 40 | 9  | US-10-074-302-4     | Sequence 4, Appl   | c 661 | 9.8 | 49.0 | 18 | 9  | US-09-932-400-77   | Sequence 77, Appl  |
| c 589 | 10 | 50.0 | 40 | 9  | US-10-109-971-6     | Sequence 6, Appl   | c 662 | 9.8 | 49.0 | 19 | 9  | US-10-074-246-10   | Sequence 10, Appl  |
| c 590 | 10 | 50.0 | 40 | 9  | US-10-096-724-1     | Sequence 1, Appl   | c 663 | 9.8 | 49.0 | 19 | 10 | US-09-817-014-57   | Sequence 57, App   |
| c 591 | 10 | 50.0 | 40 | 9  | US-09-744-517-23    | Sequence 23, Appl  | c 664 | 9.8 | 49.0 | 19 | 10 | US-09-780-668A-20  | Sequence 20, Appl  |
| c 592 | 10 | 50.0 | 40 | 9  | US-10-010-920-42    | Sequence 42, Appl  | c 665 | 9.8 | 49.0 | 20 | 9  | US-09-824-422B-189 | Sequence 189, App  |
| c 593 | 10 | 50.0 | 40 | 9  | US-10-175-002-6     | Sequence 6, Appl   | c 666 | 9.8 | 49.0 | 20 | 9  | US-09-963-668B-14  | Sequence 14, Appl  |
| c 594 | 10 | 50.0 | 40 | 10 | US-09-809-342A-5    | Sequence 5, Appl   | c 667 | 9.8 | 49.0 | 21 | 9  | US-09-880-414A-207 | Sequence 207, App  |
| c 595 | 10 | 50.0 | 40 | 10 | US-09-887-854-4     | Sequence 4, Appl   | c 668 | 9.8 | 49.0 | 21 | 9  | US-09-923-070A-20  | Sequence 20, Appl  |
| c 596 | 10 | 50.0 | 41 | 9  | US-09-860-474-51    | Sequence 51, Appl  | c 669 | 9.8 | 49.0 | 21 | 9  | US-09-923-070A-51  | Sequence 51, Appl  |
| c 597 | 10 | 50.0 | 41 | 9  | US-09-912-263-484   | Sequence 484, App  | c 670 | 9.8 | 49.0 | 21 | 9  | US-10-074-246-32   | Sequence 32, Appl  |
| c 598 | 10 | 50.0 | 41 | 10 | US-09-912-263-484   | Sequence 543, App  | c 671 | 9.8 | 49.0 | 21 | 9  | US-10-006-856A-299 | Sequence 299, App  |
| c 599 | 10 | 50.0 | 41 | 10 | US-09-801-274-795   | Sequence 795, App  | c 672 | 9.8 | 49.0 | 21 | 10 | US-09-765-081-270  | Sequence 270, App  |
| c 600 | 10 | 50.0 | 41 | 10 | US-09-801-274-795   | Sequence 929, App  | c 673 | 9.8 | 49.0 | 21 | 10 | US-09-858-728-3    | Sequence 3, Appl   |
| c 601 | 10 | 50.0 | 41 | 10 | US-09-801-274-1185  | Sequence 1185, Ap  | c 674 | 9.8 | 49.0 | 22 | 9  | US-10-124-986-25   | Sequence 25, Appl  |
| c 602 | 10 | 50.0 | 41 | 10 | US-09-801-274-1241  | Sequence 1241, Ap  | c 675 | 9.8 | 49.0 | 22 | 10 | US-09-873-448-7    | Sequence 7, Appl   |
| c 603 | 10 | 50.0 | 41 | 10 | US-09-801-274-1698  | Sequence 1698, Ap  | c 676 | 9.8 | 49.0 | 22 | 10 | US-09-981-649A-25  | Sequence 25, Appl  |

|                    |       |     |      |    |    |                    |                    |                    |
|--------------------|-------|-----|------|----|----|--------------------|--------------------|--------------------|
| Sequence 570, App  | 750   | 9.8 | 49.0 | 27 | 10 | US-09-781-804-45   | Sequence 45, Appl  |                    |
| Sequence 570, App  | c 751 | 9.8 | 49.0 | 30 | 9  | US-09-858-180-10   | Sequence 10, Appl  |                    |
| Sequence 570, App  | c 752 | 9.8 | 49.0 | 50 | 9  | US-09-847-172-10   | Sequence 10, Appl  |                    |
| Sequence 5, Appl   | 753   | 9.8 | 49.0 | 60 | 9  | US-09-887-194A-1   | Sequence 1, Appl   |                    |
| Sequence 101, App  | 754   | 9.8 | 49.0 | 60 | 9  | US-09-887-194A-6   | Sequence 6, Appl   |                    |
| Sequence 570, App  | 755   | 9.8 | 49.0 | 61 | 9  | US-09-808-580-11   | Sequence 11, Appl  |                    |
| Sequence 570, App  | 756   | 9.8 | 49.0 | 61 | 9  | US-09-847-172-11   | Sequence 11, Appl  |                    |
| Sequence 101, App  | c 757 | 9.8 | 49.0 | 61 | 9  | US-09-912-263-42   | Sequence 42, Appl  |                    |
| Sequence 570, App  | 758   | 9.8 | 49.0 | 61 | 9  | US-09-912-263-215  | Sequence 215, App  |                    |
| Sequence 60, Appl  | 759   | 9.8 | 49.0 | 61 | 9  | US-09-912-263-447  | Sequence 447, App  |                    |
| Sequence 47, Appl  | 760   | 9.8 | 49.0 | 61 | 10 | US-09-801-274-126  | Sequence 126, App  |                    |
| Sequence 526, App  | c 761 | 9.8 | 49.0 | 63 | 9  | US-10-006-852-19   | Sequence 19, Appl  |                    |
| Sequence 6, Appl   | c 762 | 9.8 | 49.0 | 63 | 10 | US-09-732-348-15   | Sequence 15, Appl  |                    |
| Sequence 9, Appl   | c 763 | 9.8 | 49.0 | 66 | 8  | US-08-987-756-6    | Sequence 6, Appl   |                    |
| Sequence 526, App  | c 764 | 9.8 | 49.0 | 66 | 9  | US-09-966-546-47   | Sequence 47, Appl  |                    |
| Sequence 526, App  | c 765 | 9.8 | 49.0 | 66 | 9  | US-09-966-545-47   | Sequence 47, Appl  |                    |
| Sequence 526, App  | c 766 | 9.8 | 49.0 | 66 | 9  | US-09-965-212-47   | Sequence 47, Appl  |                    |
| Sequence 526, App  | c 767 | 9.8 | 49.0 | 66 | 10 | US-09-882-246-44   | Sequence 44, Appl  |                    |
| Sequence 526, App  | c 768 | 9.8 | 49.0 | 66 | 10 | US-09-825-012-20   | Sequence 20, App   |                    |
| Sequence 526, App  | c 769 | 9.8 | 49.0 | 68 | 10 | US-09-732-348-20   | Sequence 20, App   |                    |
| Sequence 526, App  | c 770 | 9.8 | 49.0 | 68 | 10 | US-09-750-021-1    | Sequence 1, Appl   |                    |
| Sequence 526, App  | 771   | 9.8 | 49.0 | 68 | 10 | US-09-755-840-14   | Sequence 14, Appl  |                    |
| Sequence 526, App  | 772   | 9.8 | 49.0 | 69 | 9  | US-10-079-136-23   | Sequence 23, Appl  |                    |
| Sequence 526, App  | 773   | 9.8 | 49.0 | 69 | 9  | US-10-072-438-9    | Sequence 9, Appl   |                    |
| Sequence 526, App  | 774   | 9.8 | 49.0 | 69 | 9  | US-10-137-765-11   | Sequence 11, Appl  |                    |
| Sequence 526, App  | 775   | 9.8 | 49.0 | 69 | 9  | US-10-146-437-11   | Sequence 11, Appl  |                    |
| Sequence 526, App  | c 776 | 9.8 | 49.0 | 69 | 10 | US-09-901-904-5    | Sequence 5, Appl   |                    |
| Sequence 526, App  | c 777 | 9.8 | 49.0 | 69 | 10 | US-09-760-574-21   | Sequence 21, Appl  |                    |
| Sequence 526, App  | c 778 | 9.8 | 49.0 | 69 | 12 | US-10-116-064-8    | Sequence 8, Appl   |                    |
| Sequence 4, Appl   | 779   | 9.8 | 49.0 | 69 | 9  | US-09-860-474-227  | Sequence 227, App  |                    |
| Sequence 526, App  | 780   | 9.8 | 49.0 | 69 | 40 | 10                 | US-09-733-400-7    | Sequence 7, Appl   |
| Sequence 526, App  | c 781 | 9.8 | 49.0 | 69 | 40 | 10                 | US-09-912-679-80   | Sequence 80, Appl  |
| Sequence 526, App  | c 782 | 9.8 | 49.0 | 69 | 42 | 10                 | US-09-824-568-3    | Sequence 3, Appl   |
| Sequence 200, App  | c 783 | 9.8 | 49.0 | 69 | 44 | 10                 | US-09-824-567-3    | Sequence 3, Appl   |
| Sequence 41, Appl  | 784   | 9.8 | 49.0 | 69 | 45 | 10                 | US-09-932-679-23   | Sequence 23, Appl  |
| Sequence 526, App  | 785   | 9.8 | 49.0 | 69 | 9  | US-09-864-785-4298 | Sequence 4298, App |                    |
| Sequence 526, App  | 786   | 9.8 | 49.0 | 69 | 9  | US-09-864-785-4300 | Sequence 4300, App |                    |
| Sequence 526, App  | 787   | 9.8 | 49.0 | 69 | 9  | US-09-864-785-4315 | Sequence 4315, App |                    |
| Sequence 526, App  | 788   | 9.8 | 49.0 | 69 | 9  | US-09-864-785-4316 | Sequence 4316, App |                    |
| Sequence 526, App  | 789   | 9.8 | 49.0 | 69 | 9  | US-09-864-785-4626 | Sequence 4626, App |                    |
| Sequence 526, App  | c 790 | 9.8 | 49.0 | 69 | 10 | US-09-920-552-125  | Sequence 125, App  |                    |
| Sequence 526, App  | 791   | 9.8 | 49.0 | 69 | 16 | 9                  | US-09-829-1552-9   | Sequence 9, Appl   |
| Sequence 526, App  | 792   | 9.8 | 49.0 | 69 | 16 | 9                  | US-09-943-488-15   | Sequence 15, Appl  |
| Sequence 526, App  | 793   | 9.8 | 49.0 | 69 | 16 | 10                 | US-09-943-414-19   | Sequence 19, Appl  |
| Sequence 526, App  | c 794 | 9.8 | 49.0 | 69 | 17 | 9                  | US-09-864-785-145  | Sequence 145, App  |
| Sequence 526, App  | c 795 | 9.8 | 49.0 | 69 | 17 | 9                  | US-09-864-785-264  | Sequence 264, App  |
| Sequence 526, App  | c 796 | 9.8 | 49.0 | 69 | 17 | 9                  | US-09-864-785-2102 | Sequence 2102, App |
| Sequence 6, Appl   | c 797 | 9.8 | 49.0 | 69 | 17 | 9                  | US-09-864-785-2872 | Sequence 2872, App |
| Sequence 4627, App | 798   | 9.8 | 49.0 | 69 | 17 | 9                  | US-09-825-805-491  | Sequence 491, App  |
| Sequence 1, Appl   | 799   | 9.8 | 49.0 | 69 | 17 | 9                  | US-09-961-830-819  | Sequence 819, App  |
| Sequence 271, App  | 800   | 9.8 | 49.0 | 69 | 17 | 9                  | US-10-060-830-819  | Sequence 819, App  |
| Sequence 271, App  | 801   | 9.8 | 49.0 | 69 | 17 | 9                  | US-10-060-830-820  | Sequence 820, App  |
| Sequence 271, App  | c 802 | 9.8 | 49.0 | 69 | 17 | 9                  | US-10-060-756A-449 | Sequence 449, App  |
| Sequence 271, App  | c 803 | 9.8 | 49.0 | 69 | 17 | 9                  | US-10-060-756A-450 | Sequence 450, App  |
| Sequence 271, App  | 804   | 9.8 | 49.0 | 69 | 17 | 9                  | US-10-060-756A-490 | Sequence 490, App  |
| Sequence 271, App  | 805   | 9.8 | 49.0 | 69 | 17 | 9                  | US-10-060-756A-491 | Sequence 491, App  |
| Sequence 271, App  | 806   | 9.8 | 49.0 | 69 | 17 | 10                 | US-09-866-108-1261 | Sequence 1261, App |
| Sequence 271, App  | 807   | 9.8 | 49.0 | 69 | 17 | 10                 | US-09-866-108-8424 | Sequence 8424, App |
| Sequence 271, App  | 808   | 9.8 | 49.0 | 69 | 17 | 10                 | US-09-866-108-8963 | Sequence 8963, App |
| Sequence 271, App  | c 809 | 9.8 | 49.0 | 69 | 17 | 10                 | US-09-866-108-8965 | Sequence 8965, App |
| Sequence 271, App  | c 810 | 9.8 | 49.0 | 69 | 17 | 10                 | US-09-895-040A-79  | Sequence 79, Appl  |
| Sequence 271, App  | c 811 | 9.8 | 49.0 | 69 | 17 | 10                 | US-09-895-040A-80  | Sequence 80, Appl  |
| Sequence 271, App  | 812   | 9.8 | 49.0 | 69 | 18 | 9                  | US-09-904-966A-90  | Sequence 90, Appl  |
| Sequence 271, App  | 813   | 9.8 | 49.0 | 69 | 18 | 10                 | US-09-954-697-47   | Sequence 47, Appl  |
| Sequence 271, App  | c 814 | 9.8 | 49.0 | 69 | 20 | 9                  | US-09-824-422B-119 | Sequence 119, App  |
| Sequence 271, App  | 815   | 9.8 | 49.0 | 69 | 20 | 10                 | US-09-733-294A-10  | Sequence 10, Appl  |
| Sequence 271, App  | 816   | 9.8 | 49.0 | 69 | 20 | 10                 | US-09-854-883-59   | Sequence 59, Appl  |
| Sequence 271, App  | c 817 | 9.8 | 49.0 | 69 | 20 | 10                 | US-09-825-497-17   | Sequence 17, Appl  |
| Sequence 271, App  | 818   | 9.8 | 49.0 | 69 | 20 | 10                 | US-09-791-406-13   | Sequence 13, Appl  |
| Sequence 271, App  | 819   | 9.8 | 49.0 | 69 | 20 | 10                 | US-09-791-406-14   | Sequence 14, Appl  |
| Sequence 7, Appl   | c 820 | 9.8 | 49.0 | 69 | 21 | 10                 | US-09-765-081-429  | Sequence 429, App  |
| Sequence 7, Appl   | 821   | 9.8 | 49.0 | 69 | 21 | 10                 | US-09-984-183-23   | Sequence 23, Appl  |
| Sequence 165, App  | c 822 | 9.8 | 49.0 | 69 | 22 | 9                  | US-09-978-295A-471 | Sequence 471, App  |

|     |     |      |    |    |                     |                    |     |     |      |    |    |                    |                    |
|-----|-----|------|----|----|---------------------|--------------------|-----|-----|------|----|----|--------------------|--------------------|
| 823 | 9.6 | 48.0 | 22 | 9  | US-09-778-820A-4    | Sequence 3, Appl1  | 889 | 9.6 | 48.0 | 29 | 10 | US-09-758-269-24   | Sequence 27, Appl1 |
| 824 | 9.6 | 48.0 | 22 | 9  | US-09-978-657-471   | Sequence 471, App  | 897 | 9.6 | 48.0 | 29 | 10 | US-09-845-456-15   | Sequence 15, Appl1 |
| 825 | 9.6 | 48.0 | 22 | 9  | US-09-978-192A-471  | Sequence 471, App  | 898 | 9.6 | 48.0 | 30 | 10 | US-09-748-264A-5   | Sequence 5, Appl1  |
| 826 | 9.6 | 48.0 | 22 | 9  | US-09-999-832A-471  | Sequence 471, App  | 899 | 9.6 | 48.0 | 31 | 9  | US-09-912-264-12   | Sequence 12, Appl1 |
| 827 | 9.6 | 48.0 | 22 | 9  | US-09-978-189-471   | Sequence 471, App  | 900 | 9.6 | 48.0 | 31 | 9  | US-09-912-263-291  | Sequence 291, App  |
| 828 | 9.6 | 48.0 | 22 | 9  | US-10-131-211-4     | Sequence 3, Appl1  | 901 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-62   | Sequence 62, Appl1 |
| 829 | 9.6 | 48.0 | 22 | 9  | US-09-978-608A-471  | Sequence 471, App  | 902 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-552  | Sequence 552, App  |
| 830 | 9.6 | 48.0 | 22 | 10 | US-09-767-088A-5    | Sequence 5, Appl1  | 903 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-664  | Sequence 664, App  |
| 831 | 9.6 | 48.0 | 22 | 10 | US-09-844-508-44    | Sequence 44, Appl1 | 904 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-850  | Sequence 850, App  |
| 832 | 9.6 | 48.0 | 22 | 10 | US-09-816-920-3     | Sequence 3, Appl1  | 905 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-982  | Sequence 982, App  |
| 833 | 9.6 | 48.0 | 22 | 10 | US-09-780-668A-29   | Sequence 29, Appl1 | 906 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1244 | Sequence 1244, App |
| 834 | 9.6 | 48.0 | 22 | 9  | US-09-808-602-29    | Sequence 29, Appl1 | 907 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1292 | Sequence 1292, App |
| 835 | 9.6 | 48.0 | 24 | 8  | US-08-887-305-152   | Sequence 152, App  | 908 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1425 | Sequence 1425, App |
| 836 | 9.6 | 48.0 | 24 | 9  | US-09-568-756-5     | Sequence 6, Appl1  | 909 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1471 | Sequence 1471, App |
| 837 | 9.6 | 48.0 | 24 | 9  | US-09-778-610-17    | Sequence 17, Appl1 | 910 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1482 | Sequence 1482, App |
| 838 | 9.6 | 48.0 | 24 | 9  | US-10-046-041-40    | Sequence 40, Appl1 | 911 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1658 | Sequence 1658, App |
| 839 | 9.6 | 48.0 | 24 | 9  | US-10-045-855-40    | Sequence 40, Appl1 | 912 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1659 | Sequence 1659, App |
| 840 | 9.6 | 48.0 | 24 | 9  | US-09-941-846-40    | Sequence 40, Appl1 | 913 | 9.6 | 48.0 | 31 | 10 | US-09-801-274-1709 | Sequence 1709, App |
| 841 | 9.6 | 48.0 | 24 | 9  | US-10-046-211-40    | Sequence 40, Appl1 | 914 | 9.6 | 48.0 | 31 | 9  | US-09-974-322-12   | Sequence 12, Appl1 |
| 842 | 9.6 | 48.0 | 24 | 9  | US-10-035-719-40    | Sequence 40, Appl1 | 915 | 9.6 | 48.0 | 32 | 9  | US-09-811-367B-7   | Sequence 7, Appl1  |
| 843 | 9.6 | 48.0 | 24 | 9  | US-10-046-160-40    | Sequence 40, Appl1 | 916 | 9.6 | 48.0 | 32 | 9  | US-09-847-101A-41  | Sequence 41, Appl1 |
| 844 | 9.6 | 48.0 | 24 | 12 | US-10-036-342-40    | Sequence 40, Appl1 | 917 | 9.6 | 48.0 | 32 | 10 | US-09-916-240-31   | Sequence 31, Appl1 |
| 845 | 9.6 | 48.0 | 25 | 9  | US-10-078-547-16    | Sequence 16, Appl1 | 918 | 9.6 | 48.0 | 32 | 10 | US-09-788-345-7    | Sequence 7, Appl1  |
| 846 | 9.6 | 48.0 | 25 | 9  | US-10-060-830-1070  | Sequence 1070, App | 919 | 9.6 | 48.0 | 32 | 8  | US-08-424-550B-614 | Sequence 614, App  |
| 847 | 9.6 | 48.0 | 25 | 9  | US-10-060-830-1071  | Sequence 1071, App | 920 | 9.6 | 48.0 | 33 | 10 | US-09-873-676-63   | Sequence 63, Appl1 |
| 848 | 9.6 | 48.0 | 25 | 9  | US-10-060-756A-2346 | Sequence 2346, App | 921 | 9.6 | 48.0 | 34 | 9  | US-09-925-664-20   | Sequence 20, Appl1 |
| 849 | 9.6 | 48.0 | 25 | 9  | US-10-060-756A-2347 | Sequence 2347, App | 922 | 9.6 | 48.0 | 34 | 9  | US-09-951-262-36   | Sequence 36, Appl1 |
| 850 | 9.6 | 48.0 | 25 | 9  | US-10-060-756A-2348 | Sequence 2348, App | 923 | 9.6 | 48.0 | 34 | 9  | US-09-951-262-37   | Sequence           |

```

c 969 9.6 48.0 41 9 US 09 904 820 26 Sequence 26, Appl
c 970 9.6 48.0 41 9 US 09 904 859 26 Sequence 26, Appl
c 971 9.6 48.0 41 9 US 09 909 204 26 Sequence 26, Appl
c 972 9.6 48.0 41 9 US 09 904 786 26 Sequence 26, Appl
c 973 9.6 48.0 41 9 US 09 906 646 26 Sequence 26, Appl
c 974 9.6 48.0 41 9 US 09 906 700 26 Sequence 26, Appl
c 975 9.6 48.0 41 9 US 10 066 269 102 Sequence 102, Appl
c 976 9.6 48.0 41 9 US 09 902 903 26 Sequence 26, Appl
c 977 9.6 48.0 41 9 US 09 904 749A 26 Sequence 26, Appl
c 978 9.6 48.0 41 9 US 09 903 786 26 Sequence 26, Appl
c 979 9.6 48.0 41 9 US 10 066 193 102 Sequence 102, Appl
c 980 9.6 48.0 41 9 US 10 066 211 102 Sequence 102, Appl
c 981 9.6 48.0 41 9 US 09 909 320 26 Sequence 26, Appl
c 982 9.6 48.0 41 9 US 09 823 829 29 Sequence 29, Appl
c 983 9.6 48.0 41 10 US 09 909 088B 26 Sequence 26, Appl
c 984 9.6 48.0 42 10 US 09 756 186 13 Sequence 13, Appl
c 985 9.6 48.0 42 10 US 09 918 889 27 Sequence 27, Appl
c 986 9.6 48.0 42 10 US 09 919 042 27 Sequence 27, Appl
c 987 9.6 48.0 43 9 US 10 158 745 6 Sequence 6, Appl
c 988 9.6 48.0 43 9 US 10 211 069 50 Sequence 50, Appl
c 989 9.6 48.0 45 10 US 09 997 579 43 Sequence 43, Appl
c 990 9.6 48.0 47 9 US 09 905 291A 349 Sequence 449, Appl
c 991 9.6 48.0 47 9 US 09 902 853 349 Sequence 449, Appl
c 992 9.6 48.0 47 9 US 09 907 824 349 Sequence 449, Appl
c 993 9.6 48.0 47 9 US 09 907 841 349 Sequence 449, Appl
c 994 9.6 48.0 47 9 US 09 904 011 349 Sequence 449, Appl
c 995 9.6 48.0 47 9 US 09 906 742 349 Sequence 449, Appl
c 996 9.6 48.0 47 9 US 09 906 838 349 Sequence 449, Appl
c 997 9.6 48.0 47 9 US 09 907 613 349 Sequence 449, Appl
c 998 9.6 48.0 47 9 US 09 907 942 349 Sequence 449, Appl
c 999 9.6 48.0 47 9 US 09 904 820 349 Sequence 449, Appl
c 1000 9.6 48.0 47 9 US 09 904 859 349 Sequence 449, Appl

```

## ALIGNMENTS

```

RESULT 1
US 09 867 274 19/c
: Sequence 19, Application US/09867274
: Patent No. US20020106650A1
: GENERAL INFORMATION:
: APPLICANT: Paszty, Christopher
: APPLICANT: Gao, Yeming
: TITLE OF INVENTION: Cysteine Knot Polypeptides: Cloned-2 Molecules and Uses Thereof
: FILE REFERENCE: 0101737428
: CURRENT APPLICATION NUMBER: US/09/867,274
: CURRENT FILING DATE: 2001-05-29
: PRIOR APPLICATION NUMBER: US 60/208,550
: PRIOR FILING DATE: 2000-06-01
: PRIOR APPLICATION NUMBER: US 60/224,542
: PRIOR FILING DATE: 2000-08-04
: NUMBER OF SEQ ID NOS: 25
: SOFTWARE: Patent In Version 3.0
: SEQ ID NO 19
: LENGTH: 45
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Artificial: PCR primer
US 09 867 274 19

```

```

Query Match
Best Local Similarity 76.0%; Score 15.2; DB ID: Length 45;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY 1 GAGGAGTGTATGGGAGAGC 20
      |||||
DB 41 GAGGAGTGTATGGGAGAGC 12

```

```

RESULT 2
US 10 010 717 4/c

```

```

: Sequence 4, Application US/10010717
: Patent No. US2002016589A1
: GENERAL INFORMATION:
: APPLICANT: Vinayak, Kavi S.
: APPLICANT: Lee, Linda G.
: APPLICANT: Mollab, Khairuzzaman B.
: APPLICANT: Rosenblum, Barnett B.
: TITLE OF INVENTION: Methods and Compositions for Synthesis of Labeled
: FILE REFERENCE: 4407
: CURRENT APPLICATION NUMBER: US/10/010,717
: CURRENT FILING DATE: 2001-11-07
: PRIOR APPLICATION NUMBER: 09/256,440
: PRIOR FILING DATE: 1999-02-22
: NUMBER OF SEQ ID NOS: 8
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 4
: LENGTH: 26
: TYPE: DNA
: ORGANISM: Unknown
: FEATURE:
: OTHER INFORMATION: Test Sequence
US 10 010 717 4

```

```

Query Match
Best Local Similarity 74.0%; Score 14.8; DB ID: Length 26;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGGATGGTATGGGAGAGC 19
      |||
DB 22 AGGATGGTATGGGAGAGC 5

```

```

RESULT 3
US 10 010 717 4/c
: Sequence 5, Application US/10010717
: Patent No. US2002016589A1
: GENERAL INFORMATION:
: APPLICANT: Vinayak, Kavi S.
: APPLICANT: Lee, Linda G.
: APPLICANT: Mollab, Khairuzzaman B.
: APPLICANT: Rosenblum, Barnett B.
: TITLE OF INVENTION: Methods and Compositions for Synthesis of Labeled
: FILE REFERENCE: 4407
: CURRENT APPLICATION NUMBER: US/10/010,717
: CURRENT FILING DATE: 2001-11-07
: PRIOR APPLICATION NUMBER: 09/256,440
: PRIOR FILING DATE: 1999-02-22
: NUMBER OF SEQ ID NOS: 8
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 5
: LENGTH: 26
: TYPE: DNA
: ORGANISM: Unknown
: FEATURE:
: OTHER INFORMATION: Test Sequence
US 10 010 717 5

```

```

Query Match
Best Local Similarity 80.0%; Score 14.8; DB ID: Length 26;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGGATGGTATGGGAGAGC 19
      |||
DB 22 AGGATGGTATGGGAGAGC 5

```

```

RESULT 4
US 09 799 160 20/c
: Sequence 20, Application US/09799160
: Patent No. US2002005629A1
: GENERAL INFORMATION:

```

```

1 APPLICANT: Wittwer, Carl F.
2 Kirtio, Kirk M.
3 Rasmussen, Randy P.
4 TITLE OF INVENTION: Monitoring Hybridization During PCR
5 NUMBER OF SEQUENCE: 27
6 CORRESPONDENCE ADDRESS:
7 ADDRESSEE: Thorpe, No. US2002005825Health & Western, L.L.P.
8 STREET: 9045 South 700 East, Suite 200
9 CITY: Sandy
10 STATE: Utah
11 COUNTRY: USA
12 ZIP: 84070
13
14 COMPUTER READABLE FORM:
15 MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb storage
16 COMPUTER: Toshiba T2150CDS
17 OPERATING SYSTEM: Windows 95
18 SOFTWARE: Word Perfect 7.0
19
20 CURRENT APPLICATION DATA:
21 APPLICATION NUMBER: US/09/799,160
22 FILING DATE: 05-Mar-2001
23 CLASSIFICATION: Unknown
24
25 PRIOR APPLICATION DATA:
26 APPLICATION NUMBER: 08/869,476
27 FILING DATE: Unknown
28 APPLICATION NUMBER: 08/818,267
29 FILING DATE: 17-Mar-97
30 ATTORNEY/AGENT INFORMATION:
31 NAME: Alan J. Howarth
32 REGISTRATION NUMBER: 6,554
33 REFERENCE/DOCKET NUMBER: 8616,01P7
34 TELECOMMUNICATION INFORMATION:
35 TELEPHONE: (801)566-6643
36 TELEFAX: (801)566-0750
37
38 INFORMATION FOR SEQ ID NO: 20:
39 SEQUENCE CHARACTERISTICS:
40 LENGTH: 26 base pairs
41 TYPE: nucleic acid
42 STRANDEDNESS: single-stranded
43 TOPOLOGY: linear
44
45 SEQUENCE DESCRIPTION: SEQ ID NO: 20:
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851
1852
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266
2267
2268
2269
2270
2271
2272
2273
2274
2275
2276
2277
2278
2279
2280
2281
2282
2283
2284
2285
2286
2287
2288
2289
2290
2291
2292
2293
2294
2295
2296
2297
2298
2299
2300
2301
2302
2303
2304
2305
2306
2307
2308
2309
2310
2311
2312
2313
2314
2315
2316
2317
2318
2319
2320
2321
2322
2323
2324
2325
2326
2327
2328
2329
2330
2331
2332
2333
2334
2335
2336
2337
2338
2339
2340
2341
2342
2343
2344
2345
2346
2347
2348
2349
2350
2351
2352
2353
2354
2355
2356
2357
2358
2359
2360
2361
2362
2363
2364
2365
2366
2367
2368
2369
2370
2371
2372
2373
2374
2375
2376
2377
2378
2379
2380
2381
2382
2383
2384
2385
2386
2387
2388
2389
2390
2391
2392
2393
2394
2395
2396
2397
2398
2399
2400
2401
2402
2403
2404
2405
2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421
2422
2423
2424
2425
2426
2427
2428
2429
2430
2431
2432
2433
2434
2435
2436
2437
2438
2439
2440
2441
2442
2443
2444
2445
2446
2447
2448
2449
2450
2451
2452
2453
2454
2455
2456
2457
2458
2459
2460
2461
2462
2463
2464
2465
2466
2467
2468
2469
2470
2471
2472
2473
2474
2475
2476
2477
2478
2479
2480
2481
2482
2483
2484
2485
2486
2487
2488
2489
2490
2491
2492
2493
2494
2495
2496
2497
2498
2499
2500
2501
2502
2503
2504
2505
2506
2507
2508
2509
2510
2511
2512
2513
2514
2515
2516
2517
2518
2519
2520
2521
2522
2523
2524
2525
2526
2527
2528
2529
2530
2531
2532
2533
2534
2535
2536
2537
2538
2539
2540
2541
2542
2543
2544
2545
2546
2547
2548
2549
2550
2551
2552
2553
2554
2555
2556
2557
2558
2559
2560
2561
2562
2563
2564
2565
2566
2567
2568
2569
2570
2571
2572
2573
2574
2575
2576
2577
2578
2579
2580
2581
2582
2583
2584
2585
2586
2587
2588
2589
2590

```

RESULT 8  
 US 09/874 504 47  
 ? Sequence 47, Application US/09874504  
 ? Patent No. US20020177188A1  
 ? GENERAL INFORMATION:  
 ? APPLICANT: Chen, Jian  
 ? APPLICANT: Filvaroff, Ellen  
 ? APPLICANT: Ford, Sherman  
 ? APPLICANT: Goddard, Audrey  
 ? APPLICANT: Godowski, Paul J.  
 ? APPLICANT: Grimaldi, J. Christopher  
 ? APPLICANT: Gurney, Austin L.  
 ? APPLICANT: Li, Banzhong  
 ? APPLICANT: Hillan, Kenneth J.  
 ? APPLICANT: Hymowitz, Sarah G.  
 ? APPLICANT: Thomas, Daniel  
 ? APPLICANT: Starovasnik, Melissa A.  
 ? APPLICANT: VanLooken, Memo  
 ? APPLICANT: Vandlen, Richard  
 ? APPLICANT: Watanahe, Colin K.  
 ? APPLICANT: Williams, P. Mickey  
 ? APPLICANT: Wood, William L.  
 ? APPLICANT: Yansura, Daniel  
 ? TITLE OF INVENTION: 11-17 HEMOLABOUS POLYPEPTIDES AND THERAPEUTIC USES THEREOF  
 ? FILE REFERENCE: P1681C1P4(US)  
 ? CURRENT APPLICATION NUMBER: US/09/874 504  
 ? CURRENT FILING DATE: 2001-06-05  
 ? PRIOR APPLICATION NUMBER: US 60/253,646  
 ? PRIOR FILING DATE: 2000-11-28  
 ? PRIOR APPLICATION NUMBER: US 60/244,072  
 ? PRIOR FILING DATE: 2000-10-26  
 ? PRIOR APPLICATION NUMBER: US 60/242,847  
 ? PRIOR FILING DATE: 2000-10-24  
 ? PRIOR APPLICATION NUMBER: US 60/175,461  
 ? PRIOR FILING DATE: 2000-01-11  
 ? PRIOR APPLICATION NUMBER: US 60/191,007  
 ? PRIOR FILING DATE: 2000-04-21  
 ? PRIOR APPLICATION NUMBER: US 60/214,807  
 ? PRIOR FILING DATE: 2000-06-22  
 ? PRIOR APPLICATION NUMBER: US 60/172,096  
 ? PRIOR FILING DATE: 1999-12-23  
 ? PRIOR APPLICATION NUMBER: US 60/148,487  
 ? PRIOR FILING DATE: 1999-06-09  
 ? PRIOR APPLICATION NUMBER: US 60/144,287  
 ? PRIOR FILING DATE: 1999-05-14  
 ? PRIOR APPLICATION NUMBER: US 60/141,022  
 ? PRIOR FILING DATE: 1999-04-26  
 ? PRIOR APPLICATION NUMBER: US 60/140,242  
 ? PRIOR FILING DATE: 1999-04-21  
 ? PRIOR APPLICATION NUMBER: US 60/114,621  
 ? PRIOR FILING DATE: 1998-12-23  
 ? PRIOR APPLICATION NUMBER: US 60/085,579  
 ? PRIOR FILING DATE: 1998-05-15  
 ? PRIOR APPLICATION NUMBER: US 09/854,208  
 ? PRIOR FILING DATE: 2001-05-10  
 ? PRIOR APPLICATION NUMBER: US 09/854,280  
 ? PRIOR FILING DATE: 2001-05-20  
 ? PRIOR APPLICATION NUMBER: US 09/816,744  
 ? PRIOR FILING DATE: 2001-04-22  
 ? PRIOR APPLICATION NUMBER: US 09/747,259  
 ? PRIOR FILING DATE: 2000-12-20  
 ? PRIOR APPLICATION NUMBER: US 09/644,848  
 ? PRIOR FILING DATE: 2000-08-22  
 ? PRIOR APPLICATION NUMBER: US 09/480,142  
 ? PRIOR FILING DATE: 1999-08-25  
 ? PRIOR APPLICATION NUMBER: US 09/480,148  
 ? PRIOR FILING DATE: 1999-08-25  
 ? PRIOR APPLICATION NUMBER: US 09/411,862  
 ? PRIOR FILING DATE: 1999-05-14  
 ? PRIOR APPLICATION NUMBER: US PCT/US01/06120  
 ? PRIOR FILING DATE: 2001-02-28

? PRIOR APPLICATION NUMBER: US PCT/US00/44956  
 ? PRIOR FILING DATE: 2000-12-20  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/42678  
 ? PRIOR FILING DATE: 2000-12-01  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/40874  
 ? PRIOR FILING DATE: 2000-11-10  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/24428  
 ? PRIOR FILING DATE: 2000-08-24  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/19264  
 ? PRIOR FILING DATE: 2000-06-02  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/07532  
 ? PRIOR FILING DATE: 2000-04-21  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/05841  
 ? PRIOR FILING DATE: 2000-04-02  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/05601  
 ? PRIOR FILING DATE: 2000-04-01  
 ? PRIOR APPLICATION NUMBER: US PCT/US00/04341  
 ? PRIOR FILING DATE: 2000-02-18  
 ? PRIOR APPLICATION NUMBER: US PCT/US99/41274  
 ? PRIOR FILING DATE: 1999-12-30  
 ? PRIOR APPLICATION NUMBER: US PCT/US99/10733  
 ? PRIOR FILING DATE: 1999-05-14  
 ? PRIOR APPLICATION NUMBER: US PCT/US99/05026  
 ? PRIOR FILING DATE: 1999-03-08  
 ? NUMBER OF SEQ ID NOS: 39  
 ? SEQ ID NO: 47  
 ? LENGTH: 40  
 ? TYPE: DNA  
 ? ORGANISM: Artificial Sequence  
 ? FEATURE:  
 ? OTHER INFORMATION: Synthetic oligonucleotide Probe  
 US-09-874 504 47  
 Query Match 71.0% Score 14.23 DB % Length 40%  
 Best Local Similarity 84.2% Prod. No. 200045  
 Matches 167 Conservative 07 Mismatches 47 Gaps 07  
 QY 1 GAGGAGGAGGAGGAGGAGG 19  
 111111 11111111  
 DP 16 GAGGAGGAGGAGGAGGAGG 34  
 RESULT 9  
 US 10-000 157 47  
 ? Sequence 47, Application US/10000157  
 ? Publication No. US20020162673A1  
 ? GENERAL INFORMATION:  
 ? APPLICANT: Chen, Jian  
 ? APPLICANT: Filvaroff, Ellen  
 ? APPLICANT: Ford, Sherman  
 ? APPLICANT: Goddard, Audrey  
 ? APPLICANT: Godowski, Paul J.  
 ? APPLICANT: Grimaldi, J. Christopher  
 ? APPLICANT: Gurney, Austin  
 ? APPLICANT: Li, Banzhong  
 ? APPLICANT: Hillan, Kenneth J.  
 ? APPLICANT: Hymowitz, Sarah  
 ? APPLICANT: Thomas, Daniel  
 ? APPLICANT: Starovasnik, Melissa  
 ? APPLICANT: VanLooken, Memo  
 ? APPLICANT: Vandlen, Richard  
 ? APPLICANT: Watanahe, Colin  
 ? APPLICANT: Williams, P. Mickey  
 ? APPLICANT: Wood, William  
 ? APPLICANT: Yansura, Daniel  
 ? TITLE OF INVENTION: 11-17 HEMOLABOUS POLYPEPTIDES AND THERAPEUTIC USES THEREOF  
 ? FILE REFERENCE: P1681C1P4(US)  
 ? CURRENT APPLICATION NUMBER: US/10/000 157  
 ? CURRENT FILING DATE: 2001-10-30  
 ? PRIOR APPLICATION NUMBER: 60/085,579  
 ? PRIOR FILING DATE: 1998-05-15  
 ? PRIOR APPLICATION NUMBER: 60/114,621  
 ? PRIOR FILING DATE: 1998-12-23





? PRIOR APPLICATION NUMBER: US 09/644,848  
 ? PRIOR FILING DATE: 2000-08-22  
 ? PRIOR APPLICATION NUMBER: PCT/US00/23828  
 ? PRIOR FILING DATE: 2000-08-24  
 ? PRIOR APPLICATION NUMBER: US 60/242,837  
 ? PRIOR FILING DATE: 2000-10-24  
 ? PRIOR APPLICATION NUMBER: PCT/US00/40874  
 ? PRIOR FILING DATE: 2000-11-10  
 ? PRIOR APPLICATION NUMBER: US 60/253,646  
 ? PRIOR FILING DATE: 2000-11-28  
 ? PRIOR APPLICATION NUMBER: PCT/US00/42678  
 ? NUMBER OF SEQ ID NOS: 49

SEQ ID NO 37

LENGTH: 40

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Synthetic oligonucleotide Probe

US 09 747-259 47

Query Match 71.0% Score 14.2; DB 9; Length 40;  
 Best Local Similarity 84.2% Pred. No. 26,000; Mismatches 4; Indels 0; Gaps 0;

Matches 16; Conservative 0;  
 QY 1 GAGGAGAGAGAGAGAG 19  
 III III IIIIIII  
 DB 16 GAGGAGAGAGAGAG 44

RESULT 11

US 09-765,081 279/c

? Sequence 279, Application US/09765081

? Patent No. US20020047508A1

? GENERAL INFORMATION:

? APPLICANT: Carquill, Michele

? APPLICANT: Ireland, James S.

? APPLICANT: Lander, Eric S.

? TITLE OF INVENTION: HUMAN SINGLE NUCLEOTIDE POLYMORPHISMS

? FILE REFERENCE: 2825,2008-001

? CURRENT APPLICATION NUMBER: US/09765,081

? CURRENT FILING DATE: 2001-01-18

? PRIOR APPLICATION NUMBER: US 60/176,861

? PRIOR FILING DATE: 2000-01-19

? NUMBER OF SEQ ID NOS: 461

? SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 279

LENGTH: 21

TYPE: DNA

ORGANISM: Homo sapiens

US 09-765 081 279

Query Match 70.0% Score 14; DB 10; Length 21;  
 Best Local Similarity 87.5% Pred. No. 2,500,000; Mismatches 1; Indels 0; Gaps 0;

Matches 14; Conservative 1;

QY 3 GAGGAGAGAGAGAG 18

III IIIIIIIII

DB 21 GAGGAGAGAGAGAG 6

RESULT 12

US 10 131 864 4/c

? Sequence 4, Application US/10131864

? Patent No. US20020164820A1

? GENERAL INFORMATION:

? APPLICANT: Brown, James F.

? TITLE OF INVENTION: Method of Sampling, Amplifying and Quantifying Segment of Nucleic

? TITLE OF INVENTION: Polymerase Chain Reaction Assembly Having Nanoliter Sized Sample

? FILE REFERENCE: 4654,002-02

? CURRENT APPLICATION NUMBER: US/10/131,864

? CURRENT FILING DATE: 2002-04-25

? PRIOR APPLICATION NUMBER: 09/566,714  
 ? PRIOR FILING DATE: 2000-05-02  
 ? PRIOR APPLICATION NUMBER: 09/048,762  
 ? PRIOR FILING DATE: 1997-04-17  
 ? NUMBER OF SEQ ID NOS: 4  
 ? SOFTWARE: Patent In version 4.1  
 ? SEQ ID NO 3  
 ? LENGTH: 25  
 ? TYPE: DNA  
 ? ORGANISM: Artificial Sequence  
 ? FEATURE:  
 ? OTHER INFORMATION: Dual Fluor Labeled Probe.  
 ? FEATURE:  
 ? NAME/KEY: misc feature  
 ? LOCATION: (1)..(1)  
 ? OTHER INFORMATION: N here denotes an A nucleotide that is labeled with a carboxyl  
 ? OTHER INFORMATION: methylluminine.  
 ? FEATURE:  
 ? NAME/KEY: misc feature  
 ? LOCATION: (7)..(7)  
 ? OTHER INFORMATION: N here denotes a C nucleotide that is labeled with a carboxyl  
 ? OTHER INFORMATION: methylluminine.  
 ? SEQ ID NO 131 864 3

Query Match 66.0% Score 13.2; DB 9; Length 26;  
 Best Local Similarity 78.9% Pred. No. 6,200,000; Mismatches 15; Conservative 0; Indels 0; Gaps 0;

QY 2 AGGAGGATAGGAGAG 20  
 III IIIIIII III  
 DB 21 AGGAGGATAGGAGAG 4

RESULT 13

US 09-996-264-20/c

? Sequence 20, Application US/09996264

? Publication No. US20030004325A1

? GENERAL INFORMATION:

? APPLICANT: Philip Dan Cook

? APPLICANT: Andrew Kawasaki

? TITLE OF INVENTION: Sugar Modified oligonucleotides

? NUMBER OF SEQUENCES: 47

? CORRESPONDENCE ADDRESS:

? ADDRESSEE: Woodcock Washburn Kurtz MacKiewicz and No.

? STREET: One Liberty Place 46th Floor

? CITY: Philadelphia

? STATE: PA

? COUNTRY: U.S.A.

? ZIP: 19104

? COMPUTER READABLE FORM:

? MEDIUM TYPE: 3.5 inch disk, 720 Kb

? COMPUTER: IBM PC compatible

? OPERATING SYSTEM: PC DOS/MS DOS

? SOFTWARE: wordperfect 5.1

? CURRENT APPLICATION DATA:

? APPLICATION NUMBER: US/09/996,264

? FILING DATE: 28 Nov. US20030004325A1 2001

? CLASSIFICATION: Unknown

? PRIOR APPLICATION DATA:

? APPLICATION NUMBER: 08/471,974

? FILING DATE: Unknown

? AUTHORITY/AGENT INFORMATION:

? NAME: Joseph Tacci

? REGISTRATION NUMBER: 43,407

? REFERENCE/DOCKET NUMBER: US-2005

? TELECOMMUNICATION INFORMATION:

? TELEPHONE: 215 568 4100

? TELEFAX: 215 568 4100

? INFORMATION FOR SEQ ID NO: 20;

? SEQUENCE CHARACTERISTICS:

? LENGTH: 20 bases

? TYPE: nucleic acid

? STRANDEDNESS: single

TOPOLGY: linear  
ANTI-SENSE: yes  
SEQUENCE DESCRIPTION: SEQ ID NO: 20;  
US-09-996-264-20

Query Match 63.0%; Score 12.6; DB 9; Length 20;  
Best Local Similarity 78.9%; Pred. No. 9.1e+04;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 AGGGGAGGATGGGGAGGC 20  
II III III III III II  
Db 20 ATGGTGGCTGGGGGATGC 2

RESULT 14  
US-09-824-322B-141/c  
Sequence 141, Application US/09824322B  
Publication No. US20030022848A1  
GENERAL INFORMATION:  
APPLICANT: Baker, Brenda  
APPLICANT: Bennett, C. Frank  
APPLICANT: Butler, Madeline M.  
APPLICANT: Shanahan, William R.  
TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE MODULATION OF TUMOR NECROSIS FACTOR-ALPHA  
FILE REFERENCE: ISPB-0501  
CURRENT APPLICATION NUMBER: US/09/824, 322B  
CURRENT FILING DATE: 2001-04-02  
PRIOR APPLICATION NUMBER: US 09/313, 932  
PRIOR FILING DATE: 1999-05-18  
PRIOR APPLICATION NUMBER: US 09/166, 186  
PRIOR FILING DATE: 1998-10-05  
NUMBER OF SEQ ID NOS: 503  
SEQ ID NO 141  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic  
US-09-824-322B-141

Query Match 63.0%; Score 12.6; DB 9; Length 20;  
Best Local Similarity 78.9%; Pred. No. 9.1e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 AGGGGAGGATGGGGAGGC 20  
II III III III III II  
Db 20 ATGGTGGCTGGGGGATGC 2

RESULT 15  
US-09-888-326-779/c  
Sequence 779, Application US/09888326  
Publication No. US20030026801A1  
GENERAL INFORMATION:  
APPLICANT: Weiner, George  
APPLICANT: Hartmann, Gunter  
TITLE OF INVENTION: Methods for Enhancing Antibody-Induced  
TITLE OF INVENTION: Cell Lysis and Treating Cancer  
FILE REFERENCE: C1049/7052 (AWS)  
CURRENT APPLICATION NUMBER: US/09/888, 326  
CURRENT FILING DATE: 2001-06-22  
PRIOR APPLICATION NUMBER: US 60/213, 346  
PRIOR FILING DATE: 2000-06-22  
NUMBER OF SEQ ID NOS: 848  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 779  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide  
NAME/KEY: miso\_feature

LOCATION: (0)...(0)  
OTHER INFORMATION: phosphorothioate backbone  
US-09-888-326-779

Query Match 63.0%; Score 12.6; DB 9; Length 20;  
Best Local Similarity 78.9%; Pred. No. 9.1e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 AGGGGAGGATGGGGAGGC 20  
II III III III III II  
Db 20 ATGGTGGCTGGGGGATGC 2

RESULT 16  
US-09-934-138B-4/c  
Sequence 4, Application US/09934138B  
Publication No. US20030039977A1  
GENERAL INFORMATION:  
APPLICANT: Cook, Phillip D.  
APPLICANT: Manoharan, Muthiah  
TITLE OF INVENTION: Carbamate-derivatized Nucleosides And Oligonucleosides  
FILE REFERENCE: ISIS-4802  
CURRENT APPLICATION NUMBER: US/09/934, 138B  
CURRENT FILING DATE: 2002-06-25  
NUMBER OF SEQ ID NOS: 8  
SOFTWARE: Patent in version 3.1  
SEQ ID NO 4  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide Sequence  
US-09-934-138B-4

Query Match 63.0%; Score 12.6; DB 9; Length 20;  
Best Local Similarity 78.9%; Pred. No. 9.1e+03;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 AGGGGAGGATGGGGAGGC 20  
II III III III III II  
Db 20 ATGGTGGCTGGGGGATGC 2

RESULT 17  
US-09-853-688-11  
Sequence 11, Application US/09853688  
Patent No. US20020081605A1  
GENERAL INFORMATION:  
APPLICANT: Cooper, David N.  
APPLICANT: Procter, Annie M.  
APPLICANT: Gregory, John  
APPLICANT: Millar, David S.  
TITLE OF INVENTION: METHOD FOR DETECTING GROWTH HORMONE VARIATIONS IN  
FILE REFERENCE: WPM78  
CURRENT APPLICATION NUMBER: US/09/853,688  
CURRENT FILING DATE: 2001-05-14  
NUMBER OF SEQ ID NOS: 66  
SOFTWARE: Patent in Ver. 2.1  
SEQ ID NO 11  
LENGTH: 38  
TYPE: DNA  
ORGANISM: Homo sapiens  
OTHER INFORMATION: Synthetic oligonucleotide Sequence  
US-09-853-688-11

Query Match 63.0%; Score 12.6; DB 10; Length 38;  
Best Local Similarity 78.9%; Pred. No. 8.9e+04;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 AGGGGAGGATGGGGAGGC 20  
II III III III III II  
Db 5 AGGGGAGGATGGGGGAGAC 23

## RESULT 18

US-09-920-300A 1257/c  
 ? Sequence 1257, Application US/09420300A  
 ? Patent No. US20020146728A1  
 ? GENERAL INFORMATION:  
 ? APPLICANT: King, Gordon E.  
 ? APPLICANT: Meddett, Madeline Joy  
 ? APPLICANT: Xu, Jiamin  
 ? APPLICANT: Seelster, Heather  
 ? TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY  
 ? TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER  
 ? FILE REFERENCE: 210121.547  
 ? CURRENT APPLICATION NUMBER: US/09/920, 300A  
 ? CURRENT FILING DATE: 2001-07-31  
 ? NUMBER OF SEQ ID NOS: 1789  
 ? SOFTWARE: FastSeq for Windows Version 4.0  
 ? SEQ ID NO 1257  
 ? LENGTH: 50  
 ? TYPE: DNA  
 ? ORGANISM: Homo sapiens  
 US-09-920-300A 1257

Query Match  
 Best Local Similarity 63.08; Score 12.6; DB 10; Length 50;  
 Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGGGAGATGAGGAGG 19

DB 45 GAGGAGGATGAGGAGG 17

## RESULT 19

US-10-033-528 1257/c  
 ? Sequence 1257, Application US/10033528  
 ? Patent No. US20020141971A1  
 ? GENERAL INFORMATION:  
 ? APPLICANT: King, Gordon E.  
 ? APPLICANT: Meddett, Madeline Joy  
 ? APPLICANT: Xu, Jiamin  
 ? APPLICANT: Seelster, Heather  
 ? TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY  
 ? TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER  
 ? FILE REFERENCE: 210121.547c1  
 ? CURRENT APPLICATION NUMBER: US/10/033,528  
 ? CURRENT FILING DATE: 2001-12-26  
 ? NUMBER OF SEQ ID NOS: 1896  
 ? SOFTWARE: FastSeq for Windows Version 4.0  
 ? SEQ ID NO 1257  
 ? LENGTH: 50  
 ? TYPE: DNA  
 ? ORGANISM: Homo sapiens  
 US-10-033-528 1257

Query Match  
 Best Local Similarity 63.08; Score 12.6; DB 12; Length 50;  
 Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGGGAGATGAGGAGG 19

DB 45 GAGGAGGATGAGGAGG 17

## RESULT 20

US-09-945-464 8  
 ? Sequence 8, Application US/09945464  
 ? Publication No. US2004002715A1  
 ? GENERAL INFORMATION:  
 ? APPLICANT: Meyer, Joanne  
 ? APPLICANT: Barrington Martin, Rory  
 ? APPLICANT: Parker, Alexander  
 ? TITLE OF INVENTION: MEMBERS AND COMPOSITIONS FOR DIAGNOSING AND TREATING NEUROPSYCHIA  
 ? TITLE OF INVENTION: DISORDERS SUCH AS SCHIZOPHRENIA

? FILE REFERENCE: 3322/10/02 081  
 ? CURRENT APPLICATION NUMBER: US/09/945, 464  
 ? CURRENT FILING DATE: 2001-08-23  
 ? PRIOR APPLICATION NUMBER: US-09/757, 400  
 ? PRIOR FILING DATE: 2001-01-09  
 ? NUMBER OF SEQ ID NOS: 90  
 ? SOFTWARE: Patent In Version 4.0  
 ? SEQ ID NO 8  
 ? LENGTH: 20  
 ? TYPE: DNA  
 ? ORGANISM: Artificial Sequence  
 ? FEATURE:  
 ? OTHER INFORMATION: DNA primer  
 US-09-945-464-8

Query Match  
 Best Local Similarity 61.08; Score 12.2; DB 9; Length 20;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 AGGGGAGATGAGGAGG 18

DB 4 AGGGGAGATGAGGAGG 20

## RESULT 21

US-09-808-994 4  
 ? Sequence 4, Application US/09808994  
 ? Patent No. US2002005106A1  
 ? GENERAL INFORMATION:  
 ? APPLICANT: EBERSOLE, RICHARD C.  
 ? APPLICANT: HENDRICKSON, EMMIN R.  
 ? APPLICANT: MICHAEL, PERRY P.  
 ? APPLICANT: BAEZ, LUIS  
 ? APPLICANT: NEELAVANKAN, NEEL  
 ? TITLE OF INVENTION: A METHOD FOR THE DETECTION OF AN ANALYTE BY MEANS OF A  
 ? TITLE OF INVENTION: NOVEL NUCLEIC ACID REORDER  
 ? FILE REFERENCE: 011212 US NA  
 ? CURRENT APPLICATION NUMBER: US/09/808, 994  
 ? CURRENT FILING DATE: 2001-05-16  
 ? PRIOR APPLICATION NUMBER: 60/211,293  
 ? PRIOR FILING DATE: 2000-06-13  
 ? NUMBER OF SEQ ID NOS: 13  
 ? SOFTWARE: Microsoft Office 97  
 ? SEQ ID NO 4  
 ? LENGTH: 20  
 ? TYPE: DNA  
 ? ORGANISM: Artificial Sequence  
 ? FEATURE:  
 ? OTHER INFORMATION: Description of Artificial Sequence: primer  
 US-09-808-994 4

Query Match  
 Best Local Similarity 61.08; Score 12.2; DB 10; Length 20;  
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GGGGAGATGAGGAGG 19

DB 4 GGGGAGATGAGGAGG 19

## RESULT 22

US-09-795-90A 10/c  
 ? Sequence 10, Application US/0979590A  
 ? Patent No. US2002016490A1  
 ? GENERAL INFORMATION:  
 ? APPLICANT: Lind, Jordan J.N.  
 ? APPLICANT: Liu, Xiang  
 ? APPLICANT: Koesch, Gerald  
 ? TITLE OF INVENTION: Catalytically Active Recombinant Membranes and Methods  
 ? TITLE OF INVENTION: of Use thereof  
 ? FILE REFERENCE: 0867 129  
 ? CURRENT APPLICATION NUMBER: US/09/795, 90A  
 ? CURRENT FILING DATE: 2001-02-28

```

: PRIOR APPLICATION NUMBER: 09/604,608
: PRIOR FILING DATE: 2000-06-27
: PRIOR APPLICATION NUMBER: 60/168,060
: PRIOR FILING DATE: 1999-11-30
: PRIOR APPLICATION NUMBER: 60/177,836
: PRIOR FILING DATE: 2000-01-25
: PRIOR APPLICATION NUMBER: 60/178,368
: PRIOR FILING DATE: 2000-01-27
: PRIOR APPLICATION NUMBER: 60/210,292
: PRIOR FILING DATE: 2000-06-08
: NUMBER OF SEQ ID NOS: 31
: SOFTWARE: Patent In Ver. 2.1
: SEQ ID NO 10
: LENGTH: 28
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-795-904A-10

```

```

Query Match          61.0%   Score 12.2; DB 9; Length 28;
Best Local Similarity 82.4%   Prod. No. 1,3e+04;
Matches 14; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

```

QY 4 GGGGGCATGGGGAGGC 20
   11 1111111111 11
Db 22 GGGGGCATGGGGAGGC 6

```

```

RESULT 24
US-09-795-904A-11
: Sequence 11, Application US/09795903A
: Patent No. US20020164760A1
: GENERAL INFORMATION:
: APPLICANT: Land, Jordan J.N.
: APPLICANT: Lin, Xinni
: TITLE OF INVENTION: Catalytically Active Recombinant Memapsin and Methods
: TITLE OF INVENTION: of Use Thereof
: FILE REFERENCE: OMRF 179
: CURRENT APPLICATION NUMBER: US/09795,903A
: CURRENT FILING DATE: 2001-02-28
: PRIOR APPLICATION NUMBER: 09/604,608
: PRIOR FILING DATE: 2000-06-27
: PRIOR APPLICATION NUMBER: 60/168,060
: PRIOR FILING DATE: 1999-11-30
: PRIOR APPLICATION NUMBER: 60/177,836
: PRIOR FILING DATE: 2000-01-25
: PRIOR APPLICATION NUMBER: 60/178,368
: PRIOR FILING DATE: 2000-01-27
: PRIOR APPLICATION NUMBER: 60/210,292
: PRIOR FILING DATE: 2000-06-08
: NUMBER OF SEQ ID NOS: 31
: SOFTWARE: Patent In Ver. 2.1
: SEQ ID NO 11
: LENGTH: 28
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-795-904A-11

```

```

Query Match          61.0%   Score 12.2; DB 9; Length 28;
Best Local Similarity 82.4%   Prod. No. 1,3e+04;
Matches 14; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

```

QY 4 GGGGGCATGGGGAGGC 20
   11 1111111111 11
Db 7 GGGGGCATGGGGAGGC 24

```

```

RESULT 24
US-09-795-904A-10/c

```

```

: Sequence 10, Application US/09796264
: Patent No. US20020049303A1
: GENERAL INFORMATION:
: APPLICANT: Land, Jordan J.N.
: APPLICANT: Lin, Xinni
: APPLICANT: Koelsch, Gerald
: TITLE OF INVENTION: Catalytically Active Recombinant Memapsin and Methods
: TITLE OF INVENTION: of Use Thereof
: FILE REFERENCE: OMRF 179
: CURRENT APPLICATION NUMBER: US/09796,264
: CURRENT FILING DATE: 2001-02-28
: PRIOR APPLICATION NUMBER: 09/604,608
: PRIOR FILING DATE: 2000-06-27
: PRIOR APPLICATION NUMBER: 60/168,060
: PRIOR FILING DATE: 1999-11-30
: PRIOR APPLICATION NUMBER: 60/177,836
: PRIOR FILING DATE: 2000-01-25
: PRIOR APPLICATION NUMBER: 60/178,368
: PRIOR FILING DATE: 2000-01-27
: PRIOR APPLICATION NUMBER: 60/210,292
: PRIOR FILING DATE: 2000-06-08
: NUMBER OF SEQ ID NOS: 31
: SOFTWARE: Patent In Ver. 2.1
: SEQ ID NO 10
: LENGTH: 28
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-796-264-10

```

```

Query Match          61.0%   Score 12.2; DB 10; Length 28;
Best Local Similarity 82.4%   Prod. No. 1,3e+04;
Matches 14; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

```

QY 4 GGGGGCATGGGGAGGC 20
   11 1111111111 11
Db 22 GGGGGCATGGGGAGGC 6

```

```

RESULT 25
US-09-796-264-11
: Sequence 11, Application US/09796264
: Patent No. US20020049303A1
: GENERAL INFORMATION:
: APPLICANT: Land, Jordan J.N.
: APPLICANT: Lin, Xinni
: APPLICANT: Koelsch, Gerald
: TITLE OF INVENTION: Catalytically Active Recombinant Memapsin and Methods
: TITLE OF INVENTION: of Use Thereof
: FILE REFERENCE: OMRF 179
: CURRENT APPLICATION NUMBER: US/09796,264
: CURRENT FILING DATE: 2001-02-28
: PRIOR APPLICATION NUMBER: 09/604,608
: PRIOR FILING DATE: 2000-06-27
: PRIOR APPLICATION NUMBER: 60/168,060
: PRIOR FILING DATE: 1999-11-30
: PRIOR APPLICATION NUMBER: 60/177,836
: PRIOR FILING DATE: 2000-01-25
: PRIOR APPLICATION NUMBER: 60/178,368
: PRIOR FILING DATE: 2000-01-27
: PRIOR APPLICATION NUMBER: 60/210,292
: PRIOR FILING DATE: 2000-06-08
: NUMBER OF SEQ ID NOS: 31
: SOFTWARE: Patent In Ver. 2.1
: SEQ ID NO 11
: LENGTH: 28
: TYPE: DNA
: ORGANISM: Artificial Sequence
: FEATURE:
: OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-796-264-11

```

Query Match: 61.0%; Score 12.2; DB 10; Length 28;  
Best Local Similarity 82.4%; Pred. No. 1.4e+04;  
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 4 GGGGGATGGGGAGGC 20  
DB 1111111111111111  
DB 7 GGGGGATGGGGAGGC 23

Search completed: March 18, 2003, 14:29:17  
Job Time : 45.1148 secs







|    |      |    |    |           |             |       |    |      |    |    |          |            |
|----|------|----|----|-----------|-------------|-------|----|------|----|----|----------|------------|
| 11 | 55.0 | 44 | 17 | A2579580  | 1M0467M15   | c 299 | 11 | 55.0 | 44 | 9  | A1174097 | v2876000   |
| 11 | 55.0 | 44 | 17 | A2652279  | 1M0525K06   | c 300 | 11 | 55.0 | 44 | 9  | A1814142 | wk63a100   |
| 11 | 55.0 | 44 | 17 | A2652279  | 1M0525K06   | c 301 | 11 | 55.0 | 44 | 9  | A2345493 | 1M0101E23  |
| 11 | 55.0 | 44 | 17 | A2829582  | 2M0107F20   | c 302 | 11 | 55.0 | 44 | 17 | A2407934 | 1M117862   |
| 11 | 55.0 | 44 | 9  | A1549250  | 1P64e10_x   | c 303 | 11 | 55.0 | 44 | 17 | A2488444 | 1M011781   |
| 11 | 55.0 | 44 | 9  | A1628300  | 1M07C04_x   | c 304 | 11 | 55.0 | 44 | 17 | A2666812 | 1M054943   |
| 11 | 55.0 | 44 | 17 | A2377095  | 1M014C14    | c 305 | 11 | 55.0 | 44 | 17 | A2764507 | 1M0560N00  |
| 11 | 55.0 | 34 | 17 | A2625604  | 1M0465D16   | c 306 | 11 | 55.0 | 44 | 17 | A2820833 | 2M009411   |
| 11 | 55.0 | 34 | 17 | A2776846  | 2M0010A20   | c 307 | 11 | 55.0 | 44 | 17 | A2864816 | 2M017A41   |
| 11 | 55.0 | 34 | 17 | A2782546  | 2M0023K05   | c 308 | 11 | 55.0 | 44 | 12 | HE739910 | 60155615   |
| 11 | 55.0 | 34 | 17 | A1759480  | Arabidops   | c 309 | 11 | 55.0 | 44 | 17 | A2486433 | 1M0414N2   |
| 11 | 55.0 | 34 | 17 | A1759611  | Arabidops   | c 310 | 11 | 55.0 | 44 | 17 | A2860493 | 2M0166F02  |
| 11 | 55.0 | 35 | 17 | A2317100  | 1M0035E01   | c 311 | 11 | 55.0 | 45 | 12 | BG772081 | 60272152   |
| 11 | 55.0 | 35 | 17 | A2321115  | 1M0041H02   | c 312 | 11 | 55.0 | 45 | 17 | A2331526 | 1M0669A00  |
| 11 | 55.0 | 45 | 17 | A2389253  | 1M0149K07   | c 313 | 11 | 55.0 | 45 | 17 | A2331500 | 1M0669A00  |
| 11 | 55.0 | 35 | 17 | A2588848  | 1M0397M24   | c 314 | 11 | 55.0 | 45 | 17 | A275586  | 1M0129303  |
| 11 | 55.0 | 35 | 17 | A2636745  | 1M0495F14   | c 315 | 11 | 55.0 | 45 | 17 | A2442112 | 1M0248K00  |
| 11 | 55.0 | 35 | 17 | A2807171  | 2M0069H18   | c 316 | 11 | 55.0 | 45 | 17 | A2473613 | 1M0289903  |
| 11 | 55.0 | 35 | 17 | A2831930  | 2M0111021   | c 317 | 11 | 55.0 | 45 | 17 | A2563960 | 1M055201   |
| 11 | 55.0 | 45 | 17 | A2858898  | 2M0164H14   | c 318 | 11 | 55.0 | 45 | 17 | A2776609 | 2M0010J22  |
| 11 | 55.0 | 36 | 17 | A2462645  | 1M0269M12   | c 319 | 11 | 55.0 | 45 | 17 | A2952610 | 2M0217F00  |
| 11 | 55.0 | 36 | 17 | A2627849  | 1M0474113   | c 320 | 11 | 55.0 | 45 | 17 | AL763837 | Arabidops  |
| 11 | 55.0 | 36 | 17 | A26429871 | 1M0483E08   | c 321 | 11 | 55.0 | 46 | 9  | AA737998 | 0x15901_s  |
| 11 | 55.0 | 36 | 17 | A2643259  | 1M0506C06   | c 322 | 11 | 55.0 | 46 | 9  | AA808111 | 0x151305_s |
| 11 | 55.0 | 46 | 17 | A2764529  | 1M0560L17   | c 323 | 11 | 55.0 | 46 | 9  | AA144652 | 0x170406_s |
| 11 | 55.0 | 46 | 17 | A2766476  | 1M0564F01   | c 324 | 11 | 55.0 | 46 | 9  | A1591058 | 0x128601_x |
| 11 | 55.0 | 46 | 17 | A2777125  | 2M00561018  | c 325 | 11 | 55.0 | 46 | 9  | A1749908 | 0x128601_x |
| 11 | 55.0 | 37 | 9  | A1433088  | 1M14066_x   | c 326 | 11 | 55.0 | 46 | 17 | A2325773 | 1M0048111  |
| 11 | 55.0 | 47 | 9  | A1673722  | 1M1794D12_x | c 327 | 11 | 55.0 | 46 | 17 | A2775521 | 2M0012H00  |
| 11 | 55.0 | 37 | 17 | A2369295  | 1M0119M13   | c 328 | 11 | 55.0 | 46 | 17 | A2981881 | 2M0262022  |
| 11 | 55.0 | 47 | 17 | A2654776  | 1M0529M10   | c 329 | 11 | 55.0 | 47 | 12 | BE961349 | 601408355  |
| 11 | 55.0 | 37 | 17 | A2666510  | 1M0548M11   | c 330 | 11 | 55.0 | 47 | 17 | A2769421 | 1M0570000  |
| 11 | 55.0 | 37 | 17 | A2771220  | 1M0573A15   | c 331 | 11 | 55.0 | 47 | 17 | A2769994 | 1M0571A1   |
| 11 | 55.0 | 47 | 17 | A2784558  | 2M0027G15   | c 332 | 11 | 55.0 | 48 | 9  | AL637106 | AL637106   |
| 11 | 55.0 | 37 | 17 | A2955304  | 2M0281G04   | c 333 | 11 | 55.0 | 48 | 17 | A2381877 | 1M0148F00  |
| 11 | 55.0 | 37 | 17 | DR11K9T   | Danio rer   | c 334 | 11 | 55.0 | 48 | 17 | A2307309 | 1M0448F22  |
| 11 | 55.0 | 38 | 17 | A2371497  | 1M0122D19   | c 335 | 11 | 55.0 | 48 | 17 | A2650456 | 1M0520G30  |
| 11 | 55.0 | 38 | 17 | A2402445  | 1M0169D13   | c 336 | 11 | 55.0 | 48 | 17 | A2652813 | 1M0526N00  |
| 11 | 55.0 | 38 | 17 | A2490125  | 1M0322J19   | c 337 | 11 | 55.0 | 48 | 17 | A2860712 | 2M0166D1   |
| 11 | 55.0 | 48 | 17 | A2655948  | 1M0531N12   | c 338 | 11 | 55.0 | 48 | 17 | BH847205 | SAEK_0344  |
| 11 | 55.0 | 38 | 17 | A2657455  | 1M0533H08   | c 339 | 11 | 55.0 | 48 | 17 | AL759715 | Arabidops  |
| 11 | 55.0 | 38 | 17 | A2829800  | 2M0107I09   | c 340 | 11 | 55.0 | 49 | 9  | AA771845 | al336009_s |
| 11 | 55.0 | 38 | 17 | A2863994  | 2M0174K22   | c 341 | 11 | 55.0 | 49 | 9  | A1246743 | qk40009_x  |
| 11 | 55.0 | 48 | 17 | A2949765  | 2M0214D05   | c 342 | 11 | 55.0 | 49 | 9  | AL687813 | 1P639410_x |
| 11 | 55.0 | 39 | 17 | A2643646  | 1M0507A17   | c 343 | 11 | 55.0 | 49 | 14 | N93241   | z168007_s  |
| 11 | 55.0 | 39 | 17 | A2826077  | 2M0101A07   | c 344 | 11 | 55.0 | 49 | 17 | A2324079 | AL634079   |
| 11 | 55.0 | 39 | 17 | A2861762  | 2M0168J10   | c 345 | 11 | 55.0 | 49 | 17 | A2503905 | 1M0448F22  |
| 11 | 55.0 | 39 | 17 | A2949919  | 2M0214H16   | c 346 | 11 | 55.0 | 49 | 17 | A2506149 | 1M0447J00  |
| 11 | 55.0 | 39 | 17 | AL757684  | Arabidops   | c 347 | 11 | 55.0 | 49 | 17 | A2987985 | 2M0270F17  |
| 11 | 55.0 | 39 | 17 | AL764506  | Arabidops   | c 348 | 11 | 55.0 | 50 | 9  | AU103440 | AU103440   |
| 11 | 55.0 | 39 | 17 | DR11A191  | Danio rer   | c 349 | 11 | 55.0 | 50 | 9  | AU103444 | AU103444   |
| 11 | 55.0 | 39 | 17 | TA58010P  | T. brucei   | c 350 | 11 | 55.0 | 50 | 9  | AU103445 | AU103445   |
| 11 | 55.0 | 40 | 9  | AA974240  | 0x30H05_s   | c 351 | 11 | 55.0 | 50 | 9  | AU103448 | AU103448   |
| 11 | 55.0 | 40 | 9  | AL205954  | qk26101_x   | c 352 | 11 | 55.0 | 50 | 9  | AU103455 | AU103455   |
| 11 | 55.0 | 40 | 9  | AL560710  | qk55601_x   | c 353 | 11 | 55.0 | 50 | 9  | AU103636 | AU103636   |
| 11 | 55.0 | 40 | 9  | AL580193  | 1193404_x   | c 354 | 11 | 55.0 | 50 | 9  | AU103637 | AU103637   |
| 11 | 55.0 | 40 | 9  | AL5899729 | 1s11103_x   | c 355 | 11 | 55.0 | 50 | 9  | AU103638 | AU103638   |
| 11 | 55.0 | 40 | 17 | A2465284  | 1M0275B10   | c 356 | 11 | 55.0 | 50 | 9  | AU103639 | AU103639   |
| 11 | 55.0 | 40 | 17 | A2628038  | 1M0476N17   | c 357 | 11 | 55.0 | 50 | 9  | AU103640 | AU103640   |
| 11 | 55.0 | 40 | 17 | A2645161  | 1M0510N19   | c 358 | 11 | 55.0 | 50 | 9  | AU104458 | AU104458   |
| 11 | 55.0 | 40 | 17 | A27899767 | 2M0037I20   | c 359 | 11 | 55.0 | 50 | 9  | AU104703 | AU104703   |
| 11 | 55.0 | 40 | 17 | A2941155  | 2M0200J18   | c 360 | 11 | 55.0 | 50 | 9  | AU104704 | AU104704   |
| 11 | 55.0 | 40 | 17 | A265178   | 2M0235I08   | c 361 | 11 | 55.0 | 50 | 9  | AU104706 | AU104706   |
| 11 | 55.0 | 41 | 17 | A2424755  | 1M0204C23   | c 362 | 11 | 55.0 | 50 | 9  | AU104707 | AU104707   |
| 11 | 55.0 | 41 | 17 | A2804708  | 2M0064D17   | c 363 | 11 | 55.0 | 50 | 9  | AU104708 | AU104708   |
| 11 | 55.0 | 41 | 17 | A2871797  | 2M0184C24   | c 364 | 11 | 55.0 | 50 | 9  | AU104710 | AU104710   |
| 11 | 55.0 | 42 | 17 | A2332776  | 1M0061122   | c 365 | 11 | 55.0 | 50 | 9  | AU104955 | AU104955   |
| 11 | 55.0 | 42 | 17 | A2499950  | 1M0338I01   | c 366 | 11 | 55.0 | 50 | 9  | AU104956 | AU104956   |
| 11 | 55.0 | 42 | 17 | A2651412  | 1M0522D06   | c 367 | 11 | 55.0 | 50 | 9  | AU104958 | AU104958   |
| 11 | 55.0 | 42 | 17 | A2764537  | 1M0560M21   | c 368 | 11 | 55.0 | 50 | 9  | AU104961 | AU104961   |
| 11 | 55.0 | 42 | 17 | AZ801055  | 2M0059C22   | c 369 | 11 | 55.0 | 50 | 9  | AU104965 | AU104965   |
| 11 | 55.0 | 42 | 17 | TA63A10P  | T. brucei   | c 370 | 11 | 55.0 | 50 | 9  | AU105429 | AU105429   |
| 11 | 55.0 | 43 | 9  | A1036497  | 0p65412_r   | c 371 | 11 | 55.0 | 50 | 9  | AU105439 | AU105439   |

|       |      |      |    |    |          |          |       |      |      |    |    |          |
|-------|------|------|----|----|----------|----------|-------|------|------|----|----|----------|
| c 372 | 11   | 55.0 | 50 | 9  | A0105441 | A0105441 | 445   | 10.6 | 54.0 | 26 | 17 | AZ955924 |
| c 373 | 11   | 55.0 | 50 | 9  | A0105446 | A0105446 | c 446 | 10.6 | 54.0 | 27 | 17 | AZ955924 |
| c 374 | 11   | 55.0 | 50 | 9  | A0106808 | A0106808 | c 447 | 10.6 | 54.0 | 27 | 17 | AZ955924 |
| c 375 | 11   | 55.0 | 50 | 9  | A0106867 | A0106867 | c 448 | 10.6 | 54.0 | 27 | 17 | AZ955924 |
| c 376 | 11   | 55.0 | 50 | 9  | A0106868 | A0106868 | c 449 | 10.6 | 54.0 | 28 | 9  | A1567156 |
| c 377 | 11   | 55.0 | 50 | 9  | A0106873 | A0106873 | c 450 | 10.6 | 54.0 | 28 | 9  | A1783508 |
| c 378 | 11   | 55.0 | 50 | 9  | A0106876 | A0106876 | c 451 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 379 | 11   | 55.0 | 50 | 9  | A0256770 | A0256770 | c 452 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 380 | 11   | 55.0 | 50 | 12 | B0202612 | B0202612 | c 453 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 381 | 11   | 55.0 | 50 | 14 | B0498808 | B0498808 | c 454 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 382 | 11   | 55.0 | 50 | 17 | AZ459967 | AZ459967 | c 455 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 383 | 11   | 55.0 | 50 | 17 | AZ459967 | AZ459967 | c 456 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 384 | 11   | 55.0 | 50 | 17 | AZ459967 | AZ459967 | c 457 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 385 | 11   | 55.0 | 50 | 17 | AZ459967 | AZ459967 | c 458 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 386 | 10.8 | 54.0 | 20 | 17 | AZ459967 | AZ459967 | c 459 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 387 | 10.8 | 54.0 | 28 | 9  | A1719155 | A1719155 | c 460 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 388 | 10.8 | 54.0 | 45 | 17 | AZ459967 | AZ459967 | c 461 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 389 | 10.8 | 54.0 | 46 | 9  | A1649154 | A1649154 | c 462 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 390 | 10.8 | 54.0 | 48 | 9  | A1779442 | A1779442 | c 463 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 391 | 10.8 | 54.0 | 49 | 9  | A1811713 | A1811713 | c 464 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 392 | 10.8 | 54.0 | 40 | 9  | A1692266 | A1692266 | c 465 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 393 | 10.8 | 54.0 | 41 | 12 | B0789777 | B0789777 | c 466 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 394 | 10.8 | 54.0 | 41 | 17 | AZ440170 | AZ440170 | c 467 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 395 | 10.8 | 54.0 | 42 | 17 | AZ440170 | AZ440170 | c 468 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 396 | 10.8 | 54.0 | 43 | 9  | AA059057 | AA059057 | c 469 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 397 | 10.8 | 54.0 | 43 | 9  | A1275972 | A1275972 | c 470 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 398 | 10.8 | 54.0 | 43 | 9  | A1287872 | A1287872 | c 471 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 399 | 10.8 | 54.0 | 46 | 9  | A1973284 | A1973284 | c 472 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 400 | 10.8 | 54.0 | 48 | 17 | AZ441480 | AZ441480 | c 473 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 401 | 10.8 | 54.0 | 50 | 9  | A0102616 | A0102616 | c 474 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 402 | 10.8 | 54.0 | 50 | 9  | A0102616 | A0102616 | c 475 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 403 | 10.8 | 54.0 | 50 | 9  | A0104011 | A0104011 | c 476 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 404 | 10.8 | 54.0 | 50 | 9  | A0104012 | A0104012 | c 477 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 405 | 10.8 | 54.0 | 50 | 9  | A0104013 | A0104013 | c 478 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 406 | 10.8 | 54.0 | 50 | 9  | A0104016 | A0104016 | c 479 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 407 | 10.8 | 54.0 | 50 | 9  | A0104018 | A0104018 | c 480 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 408 | 10.8 | 54.0 | 50 | 9  | A0104020 | A0104020 | c 481 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 409 | 10.8 | 54.0 | 50 | 9  | A0104023 | A0104023 | c 482 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 410 | 10.8 | 54.0 | 50 | 9  | A0104112 | A0104112 | c 483 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 411 | 10.8 | 54.0 | 50 | 9  | A0104838 | A0104838 | c 484 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 412 | 10.8 | 54.0 | 50 | 9  | A0104841 | A0104841 | c 485 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 413 | 10.8 | 54.0 | 50 | 9  | A0104842 | A0104842 | c 486 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 414 | 10.8 | 54.0 | 50 | 9  | A0106796 | A0106796 | c 487 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 415 | 10.8 | 54.0 | 50 | 9  | A0107612 | A0107612 | c 488 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 416 | 10.8 | 54.0 | 50 | 13 | B1905898 | B1905898 | c 489 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 417 | 10.6 | 54.0 | 19 | 17 | AZ427731 | AZ427731 | c 490 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 418 | 10.6 | 54.0 | 19 | 17 | AZ447248 | AZ447248 | c 491 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 419 | 10.6 | 54.0 | 19 | 17 | AZ450212 | AZ450212 | c 492 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 420 | 10.6 | 54.0 | 19 | 17 | AZ461834 | AZ461834 | c 493 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 421 | 10.6 | 54.0 | 19 | 17 | AZ478320 | AZ478320 | c 494 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 422 | 10.6 | 54.0 | 20 | 17 | AZ512426 | AZ512426 | c 495 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 423 | 10.6 | 54.0 | 20 | 17 | AZ512414 | AZ512414 | c 496 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 424 | 10.6 | 54.0 | 20 | 17 | AZ447246 | AZ447246 | c 497 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 425 | 10.6 | 54.0 | 21 | 17 | AZ445432 | AZ445432 | c 498 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 426 | 10.6 | 54.0 | 21 | 17 | AZ476492 | AZ476492 | c 499 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 427 | 10.6 | 54.0 | 21 | 17 | AZ476492 | AZ476492 | c 500 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 428 | 10.6 | 54.0 | 22 | 9  | A1439277 | A1439277 | c 501 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 429 | 10.6 | 54.0 | 22 | 9  | A1440140 | A1440140 | c 502 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 430 | 10.6 | 54.0 | 22 | 17 | AZ447246 | AZ447246 | c 503 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 431 | 10.6 | 54.0 | 22 | 17 | AZ447246 | AZ447246 | c 504 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 432 | 10.6 | 54.0 | 22 | 17 | AZ447246 | AZ447246 | c 505 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 433 | 10.6 | 54.0 | 22 | 17 | AZ447246 | AZ447246 | c 506 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 434 | 10.6 | 54.0 | 22 | 17 | AZ447246 | AZ447246 | c 507 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 435 | 10.6 | 54.0 | 23 | 17 | AZ447246 | AZ447246 | c 508 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 436 | 10.6 | 54.0 | 23 | 17 | AZ447246 | AZ447246 | c 509 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 437 | 10.6 | 54.0 | 24 | 17 | AZ447246 | AZ447246 | c 510 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 438 | 10.6 | 54.0 | 24 | 17 | AZ447246 | AZ447246 | c 511 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 439 | 10.6 | 54.0 | 24 | 17 | AZ447246 | AZ447246 | c 512 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 440 | 10.6 | 54.0 | 25 | 9  | A1434519 | A1434519 | c 513 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 441 | 10.6 | 54.0 | 25 | 9  | A1916678 | A1916678 | c 514 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 442 | 10.6 | 54.0 | 25 | 17 | AZ510562 | AZ510562 | c 515 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 443 | 10.6 | 54.0 | 25 | 17 | AZ510562 | AZ510562 | c 516 | 10.6 | 54.0 | 28 | 17 | AZ459967 |
| c 444 | 10.6 | 54.0 | 26 | 17 | AZ409225 | AZ409225 | c 517 | 10.6 | 54.0 | 28 | 17 | AZ459967 |

|     |      |      |    |    |           |           |           |       |      |      |    |    |           |            |
|-----|------|------|----|----|-----------|-----------|-----------|-------|------|------|----|----|-----------|------------|
| 518 | 10.6 | 53.0 | 48 | 17 | AL752522  | Arabidops | AL752522  | 591   | 10.4 | 52.0 | 40 | 9  | AL684441  | wa74d16.x  |
| 519 | 10.6 | 53.0 | 49 | 9  | AA016645  | AA016645  | AA016645  | c 592 | 10.4 | 52.0 | 40 | 9  | AL723169  | 1e34004.x  |
| 520 | 10.6 | 53.0 | 49 | 9  | AL052522  | mh12402.1 | AL052522  | c 593 | 10.4 | 52.0 | 40 | 12 | BE78644   | 601466404  |
| 521 | 10.6 | 53.0 | 49 | 9  | AL149489  | AL149489  | AL149489  | 594   | 10.4 | 52.0 | 40 | 13 | BL770067  | 603054595  |
| 522 | 10.6 | 53.0 | 49 | 9  | AL1499065 | AL1499065 | AL1499065 | 595   | 10.4 | 52.0 | 40 | 17 | AZ369494  | 1M0120611  |
| 523 | 10.6 | 53.0 | 49 | 9  | AL1564984 | AL1564984 | AL1564984 | c 596 | 10.4 | 52.0 | 40 | 17 | AZ665648  | 1M0532811  |
| 524 | 10.6 | 53.0 | 49 | 9  | AL1611791 | AL1611791 | AL1611791 | c 597 | 10.4 | 52.0 | 42 | 17 | AZ761622  | 1M0556104  |
| 525 | 10.6 | 53.0 | 49 | 9  | AL1687910 | AL1687910 | AL1687910 | c 598 | 10.4 | 52.0 | 42 | 17 | AZ803885  | 2M0064E04  |
| 526 | 10.6 | 53.0 | 49 | 9  | AL1783541 | AL1783541 | AL1783541 | c 599 | 10.4 | 52.0 | 43 | 9  | AL1540852 | 1P06835.x  |
| 527 | 10.6 | 53.0 | 49 | 10 | AW134421  | AW134421  | AW134421  | 600   | 10.4 | 52.0 | 43 | 9  | AL1584078 | 1S03405.x  |
| 528 | 10.6 | 53.0 | 49 | 17 | H55111    | H55111    | H55111    | 601   | 10.4 | 52.0 | 44 | 17 | AZ342202  | 1M0075611  |
| 529 | 10.6 | 53.0 | 49 | 17 | AZ345579  | AZ345579  | AZ345579  | 602   | 10.4 | 52.0 | 44 | 17 | AZ984756  | 2M0266F21  |
| 530 | 10.6 | 53.0 | 49 | 17 | AZ821504  | AZ821504  | AZ821504  | c 603 | 10.4 | 52.0 | 44 | 17 | AL752549  | Arabidops  |
| 531 | 10.6 | 53.0 | 49 | 17 | AZ916140  | AZ916140  | AZ916140  | 604   | 10.4 | 52.0 | 45 | 12 | BF578678  | 602094151  |
| 532 | 10.6 | 53.0 | 50 | 9  | AL0102913 | AL0102913 | AL0102913 | 605   | 10.4 | 52.0 | 45 | 12 | BF669751  | 602120415  |
| 533 | 10.6 | 53.0 | 50 | 9  | AL0103463 | AL0103463 | AL0103463 | 606   | 10.4 | 52.0 | 45 | 17 | AZ632976  | AZ632976   |
| 534 | 10.6 | 53.0 | 50 | 9  | AL0103479 | AL0103479 | AL0103479 | c 607 | 10.4 | 52.0 | 46 | 9  | AL1355812 | q194b07.x  |
| 535 | 10.6 | 53.0 | 50 | 9  | AL0104075 | AL0104075 | AL0104075 | 608   | 10.4 | 52.0 | 46 | 9  | AL1584320 | 1F99a06.x  |
| 536 | 10.6 | 53.0 | 50 | 9  | AL0104293 | AL0104293 | AL0104293 | c 609 | 10.4 | 52.0 | 46 | 9  | AL1690387 | 1X87a11.x  |
| 537 | 10.6 | 53.0 | 50 | 9  | AL0104701 | AL0104701 | AL0104701 | 610   | 10.4 | 52.0 | 46 | 9  | AA224484  | 1X716d11.1 |
| 538 | 10.6 | 53.0 | 50 | 9  | AL0105220 | AL0105220 | AL0105220 | 611   | 10.4 | 52.0 | 46 | 12 | BG544334  | BG544334   |
| 539 | 10.6 | 53.0 | 50 | 9  | AL0105275 | AL0105275 | AL0105275 | c 612 | 10.4 | 52.0 | 46 | 13 | B1408611  | B1408611   |
| 540 | 10.6 | 53.0 | 50 | 9  | AL0105281 | AL0105281 | AL0105281 | c 613 | 10.4 | 52.0 | 46 | 17 | BH631760  | BH631760   |
| 541 | 10.6 | 53.0 | 50 | 9  | AL0105398 | AL0105398 | AL0105398 | 614   | 10.4 | 52.0 | 47 | 17 | AZ586480  | AZ586480   |
| 542 | 10.6 | 53.0 | 50 | 9  | AL0106977 | AL0106977 | AL0106977 | 615   | 10.4 | 52.0 | 47 | 17 | AZ859207  | AZ859207   |
| 543 | 10.6 | 53.0 | 50 | 9  | AL0106981 | AL0106981 | AL0106981 | c 616 | 10.4 | 52.0 | 47 | 17 | AZ945921  | AZ945921   |
| 544 | 10.6 | 53.0 | 50 | 9  | AL0106982 | AL0106982 | AL0106982 | c 617 | 10.4 | 52.0 | 49 | 9  | AA933146  | AA933146   |
| 545 | 10.6 | 53.0 | 50 | 9  | AL0107484 | AL0107484 | AL0107484 | 618   | 10.4 | 52.0 | 49 | 9  | AL1208610 | q144b02.x  |
| 546 | 10.6 | 53.0 | 50 | 9  | AL0107487 | AL0107487 | AL0107487 | c 619 | 10.4 | 52.0 | 49 | 9  | AL1654550 | 1q99a05.x  |
| 547 | 10.6 | 53.0 | 50 | 9  | AL0107488 | AL0107488 | AL0107488 | 620   | 10.4 | 52.0 | 49 | 9  | AL1670105 | 1q99a05.x  |
| 548 | 10.6 | 53.0 | 50 | 9  | AL0107489 | AL0107489 | AL0107489 | 621   | 10.4 | 52.0 | 49 | 13 | B1873153  | B1873153   |
| 549 | 10.6 | 53.0 | 50 | 9  | AL0107642 | AL0107642 | AL0107642 | c 622 | 10.4 | 52.0 | 50 | 9  | AL102455  | AL102455   |
| 550 | 10.6 | 53.0 | 50 | 9  | AL0107643 | AL0107643 | AL0107643 | c 623 | 10.4 | 52.0 | 50 | 9  | AL102645  | AL102645   |
| 551 | 10.4 | 52.0 | 20 | 17 | AZ321845  | AZ321845  | AZ321845  | 624   | 10.4 | 52.0 | 50 | 9  | AL102675  | AL102675   |
| 552 | 10.4 | 52.0 | 21 | 9  | AL254493  | AL254493  | AL254493  | 625   | 10.4 | 52.0 | 50 | 9  | AL102676  | AL102676   |
| 553 | 10.4 | 52.0 | 21 | 17 | AZ445794  | AZ445794  | AZ445794  | 626   | 10.4 | 52.0 | 50 | 9  | AL102726  | AL102726   |
| 554 | 10.4 | 52.0 | 22 | 17 | AZ656873  | AZ656873  | AZ656873  | 627   | 10.4 | 52.0 | 50 | 9  | AL102813  | AL102813   |
| 555 | 10.4 | 52.0 | 23 | 17 | AZ764532  | AZ764532  | AZ764532  | 628   | 10.4 | 52.0 | 50 | 9  | AL102949  | AL102949   |
| 556 | 10.4 | 52.0 | 24 | 17 | AZ656029  | AZ656029  | AZ656029  | 629   | 10.4 | 52.0 | 50 | 9  | AL104281  | AL104281   |
| 557 | 10.4 | 52.0 | 25 | 17 | AZ796046  | AZ796046  | AZ796046  | 630   | 10.4 | 52.0 | 50 | 9  | AL104282  | AL104282   |
| 558 | 10.4 | 52.0 | 26 | 17 | AZ767943  | AZ767943  | AZ767943  | 631   | 10.4 | 52.0 | 50 | 9  | AL104283  | AL104283   |
| 559 | 10.4 | 52.0 | 27 | 17 | AZ464355  | AZ464355  | AZ464355  | 632   | 10.4 | 52.0 | 50 | 9  | AL104284  | AL104284   |
| 560 | 10.4 | 52.0 | 29 | 17 | AZ391891  | AZ391891  | AZ391891  | c 633 | 10.4 | 52.0 | 50 | 9  | AL104453  | AL104453   |
| 561 | 10.4 | 52.0 | 29 | 17 | AZ764536  | AZ764536  | AZ764536  | c 634 | 10.4 | 52.0 | 50 | 9  | AL104454  | AL104454   |
| 562 | 10.4 | 52.0 | 30 | 17 | IA28A09P  | IA28A09P  | IA28A09P  | c 635 | 10.4 | 52.0 | 50 | 9  | AL104457  | AL104457   |
| 563 | 10.4 | 52.0 | 31 | 9  | AA992478  | AA992478  | AA992478  | c 636 | 10.4 | 52.0 | 50 | 9  | AL104460  | AL104460   |
| 564 | 10.4 | 52.0 | 31 | 9  | AL1580030 | AL1580030 | AL1580030 | c 637 | 10.4 | 52.0 | 50 | 9  | AL104462  | AL104462   |
| 565 | 10.4 | 52.0 | 31 | 9  | AL179367  | AL179367  | AL179367  | c 638 | 10.4 | 52.0 | 50 | 9  | AL104464  | AL104464   |
| 566 | 10.4 | 52.0 | 31 | 17 | AZ778300  | AZ778300  | AZ778300  | c 639 | 10.4 | 52.0 | 50 | 9  | AL104491  | AL104491   |
| 567 | 10.4 | 52.0 | 31 | 17 | AZ861612  | AZ861612  | AZ861612  | c 640 | 10.4 | 52.0 | 50 | 9  | AL104493  | AL104493   |
| 568 | 10.4 | 52.0 | 41 | 17 | TA178H08P | TA178H08P | TA178H08P | 641   | 10.4 | 52.0 | 50 | 9  | AL104496  | AL104496   |
| 569 | 10.4 | 52.0 | 42 | 17 | AZ764530  | AZ764530  | AZ764530  | 642   | 10.4 | 52.0 | 50 | 9  | AL104497  | AL104497   |
| 570 | 10.4 | 52.0 | 42 | 17 | AZ949191  | AZ949191  | AZ949191  | 643   | 10.4 | 52.0 | 50 | 9  | AL104498  | AL104498   |
| 571 | 10.4 | 52.0 | 42 | 17 | AL1762365 | AL1762365 | AL1762365 | 644   | 10.4 | 52.0 | 50 | 9  | AL104500  | AL104500   |
| 572 | 10.4 | 52.0 | 43 | 17 | AZ404047  | AZ404047  | AZ404047  | 645   | 10.4 | 52.0 | 50 | 9  | AL104502  | AL104502   |
| 573 | 10.4 | 52.0 | 43 | 17 | AZ806274  | AZ806274  | AZ806274  | 646   | 10.4 | 52.0 | 50 | 9  | AL104581  | AL104581   |
| 574 | 10.4 | 52.0 | 45 | 12 | BF161333  | BF161333  | BF161333  | c 647 | 10.4 | 52.0 | 50 | 9  | AL104697  | AL104697   |
| 575 | 10.4 | 52.0 | 45 | 13 | B1834797  | B1834797  | B1834797  | 648   | 10.4 | 52.0 | 50 | 9  | AL104747  | AL104747   |
| 576 | 10.4 | 52.0 | 46 | 12 | BF533462  | BF533462  | BF533462  | 649   | 10.4 | 52.0 | 50 | 9  | AL104781  | AL104781   |
| 577 | 10.4 | 52.0 | 47 | 9  | AA874697  | AA874697  | AA874697  | c 650 | 10.4 | 52.0 | 50 | 9  | AL104862  | AL104862   |
| 578 | 10.4 | 52.0 | 47 | 9  | AL1528948 | AL1528948 | AL1528948 | c 651 | 10.4 | 52.0 | 50 | 9  | AL104864  | AL104864   |
| 579 | 10.4 | 52.0 | 47 | 9  | AL1613293 | AL1613293 | AL1613293 | c 652 | 10.4 | 52.0 | 50 | 9  | AL104865  | AL104865   |
| 580 | 10.4 | 52.0 | 47 | 9  | AL179887  | AL179887  | AL179887  | 653   | 10.4 | 52.0 | 50 | 9  | AL105247  | AL105247   |
| 581 | 10.4 | 52.0 | 47 | 13 | B1629464  | B1629464  | B1629464  | c 654 | 10.4 | 52.0 | 50 | 9  | AL105396  | AL105396   |
| 582 | 10.4 | 52.0 | 47 | 13 | BM597233  | BM597233  | BM597233  | c 655 | 10.4 | 52.0 | 50 | 9  | AL105499  | AL105499   |
| 583 | 10.4 | 52.0 | 47 | 17 | AZ458403  | AZ458403  | AZ458403  | c 656 | 10.4 | 52.0 | 50 | 9  | AL105400  | AL105400   |
| 584 | 10.4 | 52.0 | 48 | 12 | BG292849  | BG292849  | BG292849  | c 657 | 10.4 | 52.0 | 50 | 9  | AL105401  | AL105401   |
| 585 | 10.4 | 52.0 | 48 | 17 | AZ414682  | AZ414682  | AZ414682  | c 658 | 10.4 | 52.0 | 50 | 9  | AL105402  | AL105402   |
| 586 | 10.4 | 52.0 | 49 | 10 | BE564864  | BE564864  | BE564864  | 659   | 10.4 | 52.0 | 50 | 9  | AL105457  | AL105457   |
| 587 | 10.4 | 52.0 | 49 | 17 | AZ490993  | AZ490993  | AZ490993  | 660   | 10.4 | 52.0 | 50 | 9  | AL105766  | AL105766   |
| 588 | 10.4 | 52.0 | 40 | 9  | AA894396  | AA894396  | AA894396  | c 661 | 10.4 | 52.0 | 50 | 9  | AL105888  | AL105888   |
| 589 | 10.4 | 52.0 | 40 | 9  | AL002051  | AL002051  | AL002051  | 662   | 10.4 | 52.0 | 50 | 9  | AL105975  | AL105975   |
| 590 | 10.4 | 52.0 | 40 | 9  | AL1366141 | AL1366141 | AL1366141 | c 663 | 10.4 | 52.0 | 50 | 9  | AL106392  | AL106392   |

|       |      |      |    |    |           |           |       |      |      |    |           |           |          |
|-------|------|------|----|----|-----------|-----------|-------|------|------|----|-----------|-----------|----------|
| 664   | 10.4 | 52.0 | 50 | 9  | AU106844  | AU106844  | c 747 | 10.2 | 51.0 | 50 | 9         | AU105542  | AU105542 |
| 665   | 10.4 | 52.0 | 50 | 9  | AU107155  | AU107155  | 748   | 10.2 | 51.0 | 50 | 9         | AU106100  | AU106100 |
| 666   | 10.4 | 52.0 | 50 | 9  | AU107246  | AU107246  | 749   | 10.2 | 51.0 | 50 | 9         | AU106401  | AU106401 |
| 667   | 10.4 | 52.0 | 50 | 9  | AU107658  | AU107658  | 740   | 10.2 | 51.0 | 50 | 9         | AU106924  | AU106924 |
| 668   | 10.4 | 52.0 | 50 | 9  | AU108047  | AU108047  | 741   | 10.2 | 51.0 | 50 | 9         | AU107844  | AU107844 |
| 669   | 10.4 | 52.0 | 50 | 10 | AV674139  | AV674139  | 742   | 10.2 | 51.0 | 50 | 9         | AU107845  | AU107845 |
| c 670 | 10.4 | 52.0 | 50 | 13 | B1488749  | B1488749  | 743   | 10.2 | 51.0 | 50 | 9         | AU107847  | AU107847 |
| c 671 | 10.2 | 51.0 | 19 | 17 | AZ323931  | AZ323931  | 744   | 10.2 | 51.0 | 50 | 9         | AU107849  | AU107849 |
| 672   | 10.2 | 51.0 | 20 | 17 | AZ579495  | AZ579495  | 745   | 10.2 | 51.0 | 50 | 9         | AU107840  | AU107840 |
| 673   | 10.2 | 51.0 | 22 | 9  | AA907872  | AA907872  | 746   | 10.2 | 51.0 | 50 | 9         | AU107841  | AU107841 |
| 674   | 10.2 | 51.0 | 22 | 9  | A1434548  | A1434548  | 747   | 10.2 | 51.0 | 50 | 9         | AU107842  | AU107842 |
| 675   | 10.2 | 51.0 | 24 | 17 | AZ467278  | AZ467278  | 748   | 10.2 | 51.0 | 50 | 9         | AU107845  | AU107845 |
| 676   | 10.2 | 51.0 | 25 | 9  | AA878841  | AA878841  | 749   | 10.2 | 51.0 | 50 | 9         | AU107847  | AU107847 |
| 677   | 10.2 | 51.0 | 25 | 9  | A1174382  | A1174382  | 750   | 10.2 | 51.0 | 50 | 9         | AU107848  | AU107848 |
| 678   | 10.2 | 51.0 | 26 | 17 | LA128F12P | LA128F12P | 751   | 10.2 | 51.0 | 50 | 9         | AU107849  | AU107849 |
| 679   | 10.2 | 51.0 | 28 | 17 | AZ800412  | AZ800412  | 752   | 10.2 | 51.0 | 50 | 9         | AU107840  | AU107840 |
| c 680 | 10.2 | 51.0 | 29 | 17 | AZ345862  | AZ345862  | 753   | 10.2 | 51.0 | 50 | 9         | AU107851  | AU107851 |
| 681   | 10.2 | 51.0 | 29 | 17 | AZ788256  | AZ788256  | 754   | 10.2 | 51.0 | 50 | 9         | AU107852  | AU107852 |
| 682   | 10.2 | 51.0 | 30 | 17 | AZ654806  | AZ654806  | 755   | 10.2 | 51.0 | 50 | 9         | AU107853  | AU107853 |
| 683   | 10.2 | 51.0 | 31 | 9  | A1560711  | A1560711  | 756   | 10.2 | 51.0 | 50 | 9         | AU107854  | AU107854 |
| 684   | 10.2 | 51.0 | 32 | 14 | T67801    | T67801    | 757   | 10.2 | 51.0 | 50 | 9         | AU107859  | AU107859 |
| 685   | 10.2 | 51.0 | 32 | 17 | AZ588790  | AZ588790  | 758   | 10.2 | 51.0 | 50 | 9         | AU107860  | AU107860 |
| 686   | 10.2 | 51.0 | 33 | 17 | AZ844379  | AZ844379  | 759   | 10.2 | 51.0 | 50 | 9         | AU107864  | AU107864 |
| c 687 | 10.2 | 51.0 | 34 | 9  | A1469585  | A1469585  | 760   | 10.2 | 51.0 | 50 | 9         | AU107865  | AU107865 |
| 688   | 10.2 | 51.0 | 35 | 12 | B3393308  | B3393308  | 761   | 10.2 | 51.0 | 50 | 9         | AU107866  | AU107866 |
| 689   | 10.2 | 51.0 | 36 | 12 | B6722046  | B6722046  | 762   | 10.2 | 51.0 | 50 | 9         | AU107876  | AU107876 |
| 690   | 10.2 | 51.0 | 36 | 17 | AZ581836  | AZ581836  | 763   | 10.2 | 51.0 | 50 | 9         | AU107878  | AU107878 |
| c 691 | 10.2 | 51.0 | 37 | 9  | A1610223  | A1610223  | 764   | 10.2 | 51.0 | 50 | 9         | AU107880  | AU107880 |
| c 692 | 10.2 | 51.0 | 37 | 14 | H95754    | H95754    | c 765 | 10.2 | 51.0 | 50 | 9         | AU108089  | AU108089 |
| 693   | 10.2 | 51.0 | 37 | 17 | AZ801943  | AZ801943  | c 766 | 10.2 | 51.0 | 50 | 14        | BQ625915  | BQ625915 |
| 694   | 10.2 | 51.0 | 37 | 17 | AZ808191  | AZ808191  | 767   | 10.2 | 51.0 | 50 | 17        | BH797430  | BH797430 |
| 695   | 10.2 | 51.0 | 37 | 17 | AZ971569  | AZ971569  | c 768 | 10.2 | 51.0 | 19 | AZ328696  | AZ328696  |          |
| 696   | 10.2 | 51.0 | 38 | 13 | B1553849  | B1553849  | c 769 | 10.2 | 51.0 | 19 | AZ345894  | AZ345894  |          |
| c 697 | 10.2 | 51.0 | 39 | 17 | AZ430589  | AZ430589  | c 770 | 10.2 | 51.0 | 19 | AZ597219  | AZ597219  |          |
| c 698 | 10.2 | 51.0 | 39 | 17 | AZ459707  | AZ459707  | c 771 | 10.2 | 51.0 | 19 | AZ813361  | AZ813361  |          |
| 699   | 10.2 | 51.0 | 39 | 17 | AZ611736  | AZ611736  | 772   | 10.2 | 51.0 | 19 | AZ949434  | AZ949434  |          |
| 700   | 10.2 | 51.0 | 39 | 17 | AZ804350  | AZ804350  | c 773 | 10.2 | 51.0 | 19 | AZ969354  | AZ969354  |          |
| 701   | 10.2 | 51.0 | 39 | 17 | AZ986277  | AZ986277  | c 774 | 10.2 | 51.0 | 20 | AZ659755  | AZ659755  |          |
| 702   | 10.2 | 51.0 | 40 | 9  | A1095185  | A1095185  | c 775 | 10.2 | 51.0 | 20 | AZ775620  | AZ775620  |          |
| 703   | 10.2 | 51.0 | 40 | 9  | A1282721  | A1282721  | 776   | 10.2 | 51.0 | 21 | AZ481351  | AZ481351  |          |
| 704   | 10.2 | 51.0 | 40 | 9  | A1683066  | A1683066  | c 777 | 10.2 | 51.0 | 21 | AZ419284  | AZ419284  |          |
| 705   | 10.2 | 51.0 | 40 | 17 | AZ412114  | AZ412114  | c 778 | 10.2 | 51.0 | 21 | AZ819353  | AZ819353  |          |
| 706   | 10.2 | 51.0 | 40 | 17 | AZ778876  | AZ778876  | 779   | 10.2 | 51.0 | 21 | AZ861360  | AZ861360  |          |
| c 707 | 10.2 | 51.0 | 40 | 17 | AZ868198  | AZ868198  | c 780 | 10.2 | 51.0 | 21 | AZ961893  | AZ961893  |          |
| c 708 | 10.2 | 51.0 | 40 | 17 | BH797868  | BH797868  | c 781 | 10.2 | 51.0 | 21 | LA38E099  | LA38E099  |          |
| 709   | 10.2 | 51.0 | 42 | 14 | F51284    | F51284    | 782   | 10.2 | 51.0 | 22 | A1688330  | A1688330  |          |
| 710   | 10.2 | 51.0 | 42 | 17 | A0225866  | A0225866  | c 783 | 10.2 | 51.0 | 22 | AZ650470  | AZ650470  |          |
| 711   | 10.2 | 51.0 | 42 | 17 | AZ602471  | AZ602471  | c 784 | 10.2 | 51.0 | 22 | AZ974046  | AZ974046  |          |
| 712   | 10.2 | 51.0 | 42 | 17 | LA160002Q | LA160002Q | 785   | 10.2 | 51.0 | 22 | AZ986234  | AZ986234  |          |
| c 713 | 10.2 | 51.0 | 43 | 9  | A1130342  | A1130342  | 786   | 10.2 | 51.0 | 23 | AZ305188  | AZ305188  |          |
| c 714 | 10.2 | 51.0 | 43 | 9  | A1610262  | A1610262  | 787   | 10.2 | 51.0 | 23 | AZ806883  | AZ806883  |          |
| c 715 | 10.2 | 51.0 | 43 | 9  | A1625345  | A1625345  | c 788 | 10.2 | 51.0 | 24 | B6386948  | B6386948  |          |
| c 716 | 10.2 | 51.0 | 43 | 9  | A1654005  | A1654005  | c 789 | 10.2 | 51.0 | 24 | AZ375584  | AZ375584  |          |
| 717   | 10.2 | 51.0 | 43 | 9  | A1744270  | A1744270  | c 790 | 10.2 | 51.0 | 24 | AZ642567  | AZ642567  |          |
| 718   | 10.2 | 51.0 | 44 | 13 | B1080461  | B1080461  | c 791 | 10.2 | 51.0 | 24 | AZ764494  | AZ764494  |          |
| 719   | 10.2 | 51.0 | 44 | 17 | AZ848941  | AZ848941  | 792   | 10.2 | 51.0 | 24 | AZ843302  | AZ843302  |          |
| c 720 | 10.2 | 51.0 | 46 | 9  | AA736376  | AA736376  | 793   | 10.2 | 51.0 | 24 | A4363E08P | A4363E08P |          |
| c 721 | 10.2 | 51.0 | 46 | 9  | A1191806  | A1191806  | 794   | 10.2 | 51.0 | 24 | A1209210  | A1209210  |          |
| c 722 | 10.2 | 51.0 | 46 | 13 | B1549257  | B1549257  | 795   | 10.2 | 51.0 | 25 | A1339004  | A1339004  |          |
| 723   | 10.2 | 51.0 | 47 | 17 | AZ331661  | AZ331661  | 796   | 10.2 | 51.0 | 25 | A1628239  | A1628239  |          |
| 724   | 10.2 | 51.0 | 47 | 17 | AZ795054  | AZ795054  | c 797 | 10.2 | 51.0 | 25 | A1632358  | A1632358  |          |
| 725   | 10.2 | 51.0 | 48 | 17 | AZ400919  | AZ400919  | 798   | 10.2 | 51.0 | 25 | A1682835  | A1682835  |          |
| 726   | 10.2 | 51.0 | 49 | 9  | AA907869  | AA907869  | c 799 | 10.2 | 51.0 | 25 | AZ308526  | AZ308526  |          |
| c 727 | 10.2 | 51.0 | 49 | 9  | A1494134  | A1494134  | 800   | 10.2 | 51.0 | 25 | AZ646480  | AZ646480  |          |
| c 728 | 10.2 | 51.0 | 49 | 9  | A1670105  | A1670105  | c 801 | 10.2 | 51.0 | 25 | AZ794289  | AZ794289  |          |
| 729   | 10.2 | 51.0 | 49 | 9  | AA195871  | AA195871  | c 802 | 10.2 | 51.0 | 25 | BH840574  | BH840574  |          |
| c 730 | 10.2 | 51.0 | 49 | 13 | B1094744  | B1094744  | 803   | 10.2 | 51.0 | 25 | LA183H02Q | LA183H02Q |          |
| 731   | 10.2 | 51.0 | 49 | 13 | B1769668  | B1769668  | c 804 | 10.2 | 51.0 | 25 | LA230H19Q | LA230H19Q |          |
| 732   | 10.2 | 51.0 | 50 | 9  | AU102711  | AU102711  | 805   | 10.2 | 51.0 | 26 | AZ457675  | AZ457675  |          |
| c 733 | 10.2 | 51.0 | 50 | 9  | AU103364  | AU103364  | c 806 | 10.2 | 51.0 | 27 | AZ457664  | AZ457664  |          |
| c 734 | 10.2 | 51.0 | 50 | 9  | AU104264  | AU104264  | 807   | 10.2 | 51.0 | 27 | AZ619350  | AZ619350  |          |
| c 735 | 10.2 | 51.0 | 50 | 9  | AU104921  | AU104921  | c 808 | 10.2 | 51.0 | 27 | AZ776617  | AZ776617  |          |
| 736   | 10.2 | 51.0 | 50 | 9  | AU104957  | AU104957  | 809   | 10.2 | 51.0 | 27 | AZ999191  | AZ999191  |          |

|     |    |      |    |    |           |           |            |       |    |      |    |    |           |           |           |
|-----|----|------|----|----|-----------|-----------|------------|-------|----|------|----|----|-----------|-----------|-----------|
| 810 | 10 | 50.0 | 27 | 17 | 1A2B9607Q | AL486597  | 1. brucei  | 884   | 19 | 50.0 | 48 | 17 | AZ627127  | AZ627127  | 1M0467.10 |
| 811 | 10 | 50.0 | 28 | 9  | AL288486  | AL288486  | q85e01.x   | 884   | 10 | 50.0 | 49 | 9  | AL638827  | AL638827  | AL638827  |
| 812 | 10 | 50.0 | 28 | 9  | AL351154  | AL351154  | qt11q11.x  | c 885 | 10 | 50.0 | 49 | 9  | AL648744  | AL648744  | AL648744  |
| 813 | 10 | 50.0 | 28 | 9  | AL445347  | AL445347  | t119b11.x  | c 886 | 10 | 50.0 | 49 | 10 | AV956618  | AV956618  | AV956618  |
| 814 | 10 | 50.0 | 28 | 9  | AL454609  | AL454609  | t676e03.x  | c 887 | 10 | 50.0 | 49 | 12 | BG112163  | BG112163  | BG112163  |
| 815 | 10 | 50.0 | 28 | 9  | AL597957  | AL597957  | ts04t01.x  | c 888 | 10 | 50.0 | 49 | 17 | AZ430589  | AZ430589  | AZ430589  |
| 816 | 10 | 50.0 | 28 | 9  | AL748673  | AL748673  | sl60d07.y  | c 889 | 10 | 50.0 | 49 | 17 | AZ862168  | AZ862168  | AZ862168  |
| 817 | 10 | 50.0 | 28 | 12 | BG642275  | BG642275  | h2 droso   | c 890 | 10 | 50.0 | 49 | 9  | AZ949370  | AZ949370  | AZ949370  |
| 818 | 10 | 50.0 | 29 | 17 | AZ348766  | AZ348766  | IM0070A03  | 891   | 10 | 50.0 | 40 | 9  | AA972469  | AA972469  | AA972469  |
| 819 | 10 | 50.0 | 29 | 17 | AZ447339  | AZ447339  | IM0244105  | 892   | 10 | 50.0 | 40 | 9  | AL155888  | AL155888  | AL155888  |
| 820 | 10 | 50.0 | 29 | 17 | AZ476559  | AZ476559  | IM0295C02  | 893   | 10 | 50.0 | 40 | 9  | AL165750  | AL165750  | AL165750  |
| 821 | 10 | 50.0 | 29 | 17 | AZ820217  | AZ820217  | 2M0092113  | 894   | 10 | 50.0 | 40 | 12 | BG047009  | BG047009  | BG047009  |
| 822 | 10 | 50.0 | 29 | 17 | AZ949281  | AZ949281  | 2M0212M12  | 895   | 10 | 50.0 | 40 | 12 | BG824661  | BG824661  | BG824661  |
| 823 | 10 | 50.0 | 30 | 14 | T97018    | T97018    | ye41q07.s1 | 896   | 10 | 50.0 | 40 | 17 | AZ668487  | AZ668487  | AZ668487  |
| 824 | 10 | 50.0 | 30 | 17 | AZ864315  | AZ864315  | 2M0174P16  | 897   | 10 | 50.0 | 40 | 17 | BH799252  | BH799252  | BH799252  |
| 825 | 10 | 50.0 | 31 | 9  | AA867755  | AA867755  | vx16b08.r  | 898   | 10 | 50.0 | 41 | 17 | AZ370339  | AZ370339  | AZ370339  |
| 826 | 10 | 50.0 | 31 | 9  | AA876793  | AA876793  | u248e12.s  | 899   | 10 | 50.0 | 41 | 17 | AZ436472  | AZ436472  | AZ436472  |
| 827 | 10 | 50.0 | 31 | 9  | AA909235  | AA909235  | o108a10.s  | 900   | 10 | 50.0 | 41 | 17 | BH626532  | BH626532  | BH626532  |
| 828 | 10 | 50.0 | 31 | 9  | AL1583520 | AL1583520 | ts12t09.x  | 901   | 10 | 50.0 | 42 | 17 | AZ361760  | AZ361760  | AZ361760  |
| 829 | 10 | 50.0 | 31 | 9  | AL1601175 | AL1601175 | tr89t05.x  | c 902 | 10 | 50.0 | 42 | 17 | AZ487175  | AZ487175  | AZ487175  |
| 830 | 10 | 50.0 | 31 | 9  | AL1608826 | AL1608826 | tw21h08.x  | 903   | 10 | 50.0 | 42 | 17 | AZ427987  | AZ427987  | AZ427987  |
| 831 | 10 | 50.0 | 31 | 9  | AL1620715 | AL1620715 | ts96b09.x  | 904   | 10 | 50.0 | 42 | 17 | AZ481878  | AZ481878  | AZ481878  |
| 832 | 10 | 50.0 | 31 | 9  | AL1628162 | AL1628162 | ty22c03.x  | 905   | 10 | 50.0 | 42 | 17 | AZ937460  | AZ937460  | AZ937460  |
| 833 | 10 | 50.0 | 31 | 9  | AL1654670 | AL1654670 | w93e05.x   | 906   | 10 | 50.0 | 42 | 17 | BH624960  | BH624960  | BH624960  |
| 834 | 10 | 50.0 | 31 | 9  | AL1658994 | AL1658994 | wg62d11.x  | c 907 | 10 | 50.0 | 42 | 17 | BH892840  | BH892840  | BH892840  |
| 835 | 10 | 50.0 | 31 | 13 | AL1105174 | AL1105174 | 602893445  | 908   | 10 | 50.0 | 43 | 9  | AL1445618 | AL1445618 | AL1445618 |
| 836 | 10 | 50.0 | 31 | 14 | AL1601309 | AL1601309 | 603245050  | 909   | 10 | 50.0 | 43 | 9  | AL1613476 | AL1613476 | AL1613476 |
| 837 | 10 | 50.0 | 31 | 14 | BM007283  | BM007283  | 603615061  | 910   | 10 | 50.0 | 43 | 9  | AA193713  | AA193713  | AA193713  |
| 838 | 10 | 50.0 | 31 | 17 | AZ341325  | AZ341325  | IM0074G09  | 911   | 10 | 50.0 | 43 | 9  | AA238745  | AA238745  | AA238745  |
| 839 | 10 | 50.0 | 31 | 17 | AZ441810  | AZ441810  | IM0306C21  | 912   | 10 | 50.0 | 43 | 17 | AZ585629  | AZ585629  | AZ585629  |
| 840 | 10 | 50.0 | 32 | 17 | AZ629177  | AZ629177  | IM0480J02  | 913   | 10 | 50.0 | 43 | 17 | AZ771147  | AZ771147  | AZ771147  |
| 841 | 10 | 50.0 | 32 | 17 | AZ334837  | AZ334837  | IM0064G21  | 914   | 10 | 50.0 | 44 | 10 | AV956024  | AV956024  | AV956024  |
| 842 | 10 | 50.0 | 32 | 17 | TA379512P | TA379512P | 1. brucei  | c 915 | 10 | 50.0 | 44 | 14 | 163878    | 163878    | 163878    |
| 843 | 10 | 50.0 | 33 | 17 | AZ776950  | AZ776950  | 2M0011H04  | c 916 | 10 | 50.0 | 44 | 17 | AZ428538  | AZ428538  | AZ428538  |
| 844 | 10 | 50.0 | 33 | 17 | TA263G03P | TA263G03P | AL483833   | 917   | 10 | 50.0 | 44 | 17 | AZ413456  | AZ413456  | AZ413456  |
| 845 | 10 | 50.0 | 34 | 17 | TA95A01P  | TA95A01P  | AL438992   | 918   | 10 | 50.0 | 44 | 17 | AZ862104  | AZ862104  | AZ862104  |
| 846 | 10 | 50.0 | 34 | 17 | AA887810  | AA887810  | tr04b04.s  | 919   | 10 | 50.0 | 45 | 10 | BE132444  | BE132444  | BE132444  |
| 847 | 10 | 50.0 | 34 | 9  | AA996016  | AA996016  | os26d10.s  | 920   | 10 | 50.0 | 45 | 17 | AZ407159  | AZ407159  | AZ407159  |
| 848 | 10 | 50.0 | 34 | 9  | AL1270065 | AL1270065 | tr19t01.x  | 921   | 10 | 50.0 | 45 | 17 | AZ413281  | AZ413281  | AZ413281  |
| 849 | 10 | 50.0 | 34 | 9  | AL146513  | AL146513  | 1j20d05.x  | 922   | 10 | 50.0 | 45 | 17 | AZ784517  | AZ784517  | AZ784517  |
| 850 | 10 | 50.0 | 34 | 9  | AL1608946 | AL1608946 | tw85d09.x  | c 923 | 10 | 50.0 | 46 | 9  | AA808023  | AA808023  | AA808023  |
| 851 | 10 | 50.0 | 34 | 17 | AZ596940  | AZ596940  | 1M0410G01  | c 924 | 10 | 50.0 | 46 | 9  | AA916587  | AA916587  | AA916587  |
| 852 | 10 | 50.0 | 34 | 17 | AL2645448 | AL2645448 | 1M0491J15  | 925   | 10 | 50.0 | 46 | 9  | AA946385  | AA946385  | AA946385  |
| 853 | 10 | 50.0 | 34 | 17 | TA128E02Q | TA128E02Q | AL464057   | c 926 | 10 | 50.0 | 46 | 9  | AL1094098 | AL1094098 | AL1094098 |
| 854 | 10 | 50.0 | 34 | 17 | TA367E10Q | TA367E10Q | AL495240   | c 927 | 10 | 50.0 | 46 | 9  | AL171479  | AL171479  | AL171479  |
| 855 | 10 | 50.0 | 35 | 9  | AL1594363 | AL1594363 | AL594363   | c 928 | 10 | 50.0 | 46 | 9  | AL171447  | AL171447  | AL171447  |
| 856 | 10 | 50.0 | 35 | 17 | AZ606600  | AZ606600  | IM0428P05  | 929   | 10 | 50.0 | 46 | 9  | AL1521423 | AL1521423 | AL1521423 |
| 857 | 10 | 50.0 | 35 | 17 | AZ784718  | AZ784718  | 2M0027K01  | 930   | 10 | 50.0 | 46 | 9  | AL1521635 | AL1521635 | AL1521635 |
| 858 | 10 | 50.0 | 35 | 17 | AZ829796  | AZ829796  | 2M0107H11  | 931   | 10 | 50.0 | 46 | 9  | AL1669413 | AL1669413 | AL1669413 |
| 859 | 10 | 50.0 | 35 | 17 | AZ848204  | AZ848204  | 2M0133K17  | c 932 | 10 | 50.0 | 46 | 9  | AL1794579 | AL1794579 | AL1794579 |
| 860 | 10 | 50.0 | 35 | 17 | AZ861607  | AZ861607  | 2M0168P11  | c 933 | 10 | 50.0 | 46 | 9  | AL1929995 | AL1929995 | AL1929995 |
| 861 | 10 | 50.0 | 36 | 9  | AL640463  | AL640463  | AL640463   | 934   | 10 | 50.0 | 46 | 9  | AA508836  | AA508836  | AA508836  |
| 862 | 10 | 50.0 | 36 | 9  | AL640463  | AL640463  | AL640463   | 935   | 10 | 50.0 | 46 | 10 | AW651831  | AW651831  | AW651831  |
| 863 | 10 | 50.0 | 36 | 13 | BM050289  | BM050289  | 503632506  | 936   | 10 | 50.0 | 46 | 13 | BE1837191 | BE1837191 | BE1837191 |
| 864 | 10 | 50.0 | 36 | 17 | AZ782522  | AZ782522  | 2M0022P20  | c 937 | 10 | 50.0 | 46 | 17 | AZ445443  | AZ445443  | AZ445443  |
| 865 | 10 | 50.0 | 36 | 17 | AZ784857  | AZ784857  | 2M0028108  | c 938 | 10 | 50.0 | 46 | 17 | AZ660725  | AZ660725  | AZ660725  |
| 866 | 10 | 50.0 | 37 | 9  | AL129402  | AL129402  | qt41b07.x  | c 939 | 10 | 50.0 | 47 | 10 | BE124942  | BE124942  | BE124942  |
| 867 | 10 | 50.0 | 37 | 9  | AL109860  | AL109860  | qt67h04.x  | 940   | 10 | 50.0 | 47 | 14 | BE127899  | BE127899  | BE127899  |
| 868 | 10 | 50.0 | 37 | 9  | AL157425  | AL157425  | qt01e09.x  | c 941 | 10 | 50.0 | 47 | 14 | BE127899  | BE127899  | BE127899  |
| 869 | 10 | 50.0 | 37 | 9  | AL147414  | AL147414  | tm5h10.x   | 942   | 10 | 50.0 | 47 | 17 | AQ025214  | AQ025214  | AQ025214  |
| 870 | 10 | 50.0 | 37 | 9  | AL1698327 | AL1698327 | tx63e12.x  | 943   | 10 | 50.0 | 47 | 17 | AZ079000  | AZ079000  | AZ079000  |
| 871 | 10 | 50.0 | 37 | 9  | AL1971855 | AL1971855 | wv29e06.x  | 944   | 10 | 50.0 | 47 | 17 | AZ772741  | AZ772741  | AZ772741  |
| 872 | 10 | 50.0 | 37 | 17 | AZ451733  | AZ451733  | 1M0089K21  | c 945 | 10 | 50.0 | 47 | 17 | AZ946014  | AZ946014  | AZ946014  |
| 873 | 10 | 50.0 | 37 | 17 | AZ361686  | AZ361686  | IM0106C22  | c 946 | 10 | 50.0 | 48 | 17 | AZ439947  | AZ439947  | AZ439947  |
| 874 | 10 | 50.0 | 37 | 17 | AZ476475  | AZ476475  | IM0295C24  | 947   | 10 | 50.0 | 49 | 9  | AA041234  | AA041234  | AA041234  |
| 875 | 10 | 50.0 | 37 | 17 | AZ593655  | AZ593655  | IM0405L16  | c 948 | 10 | 50.0 | 49 | 9  | AL1654730 | AL1654730 | AL1654730 |
| 876 | 10 | 50.0 | 37 | 17 | AZ946580  | AZ946580  | 2M0193018  | 949   | 10 | 50.0 | 49 | 9  | AL1814846 | AL1814846 | AL1814846 |
| 877 | 10 | 50.0 | 37 | 17 | AZ989635  | AZ989635  | 2M0273K06  | c 950 | 10 | 50.0 | 49 | 9  | AL1951873 | AL1951873 | AL1951873 |
| 878 | 10 | 50.0 | 37 | 17 | BB847696  | BB847696  | SALK_U058  | c 951 | 10 | 50.0 | 49 | 9  | AA149026  | AA149026  | AA149026  |
| 879 | 10 | 50.0 | 38 | 9  | AA108281  | AA108281  | EST0024.1  | c 952 | 10 | 50.0 | 49 | 12 | BG55805   | BG55805   | BG55805   |
| 880 | 10 | 50.0 | 38 | 10 | BE534187  | BE534187  | 601232196  | c 953 | 10 | 50.0 | 49 | 14 | BE18118   | BE18118   | BE18118   |
| 881 | 10 | 50.0 | 38 | 14 | BE3974    | BE3974    | yl10t05.s1 | c 954 | 10 | 50.0 | 49 | 17 | AZ495400  | AZ495400  | AZ495400  |
| 882 | 10 | 50.0 | 38 | 17 | AZ419566  | AZ419566  | IM0196F12  | c 955 | 10 | 50.0 | 49 | 17 | AZ430158  | AZ430158  | AZ430158  |



/clone\_lib "Soares\_mammary\_gland NbMMG"  
 /sex "male"  
 /tissue\_type "mammary\_gland"  
 /dev\_stage "4 weeks"  
 /lab\_host "tbl08"  
 /note "organ: mammary gland; Vector: p1713D-Pac (Pharmacia)  
 ) with a modified polylinker; Site\_1: Not 1; Site\_2: Eco  
 RI; 1st strand cDNA was primed with a Not 1 - oligo(dT)  
 primer [5].

TGTTACCAATCGAATGGAGGCGGCGAATGCTTTTCTTTTCTTTT  
 T 3'; double-stranded cDNA was ligated to Eco RI  
 adaptors (Pharmacia), digested with Not 1 and cloned into  
 the Not 1 and Eco RI sites of the modified p1713 vector.  
 RNA provided by Dr. Minoru Ko, Wayne State Univ. Library  
 constructed and normalized by Bento Soares and M.Fatima  
 Bonaldo."

BASE COUNT 11 a 14 c 10 q 8 t  
 ORIGIN

Query Match 72.0%; Score 14.4; DB 9; Length 43;  
 Best Local Similarity 94.8%; Pred. No. 8.6e+04;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CGAGGAGGATGCGGAG 16  
 TTTT TTTTTTTTTT  
 Tb 4 CGAGGAGGATGCGGAG 28

## RESULT 4

A1423979

LOCUS

DEFINITION A1423979 43 bp mRNA linear EST 09-MAR-1999  
 similar to SW:SP49\_HUMAN Q15427 SPICEGLOME ASSOCIATED PROTEIN 49  
 ; contains element MER22 repetitive element ;, mRNA sequence.

A1423979

VERSION A1423979.1 GI:4269910

KEYWORDS

SOURCE

ORGANISM

human.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 43)

NC1/NINDS-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.National Cancer Institute / National Institute of Neurological  
 Disorders and Stroke, Brain Tumor Genome Anatomy Project  
 (CGAP/HTGAP), Tumor Gene Index

Unpublished (1998)

Contact: Robert Strausberg, Ph.D.  
 Email: [capbs-r@mail.nih.gov](mailto:capbs-r@mail.nih.gov)Tissue Procurement: David N. Louis, M.D., Myrna K. Rosenfeld M.D.,  
 Ph.D.cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima  
 Bonaldo, Ph.D.

cDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center  
 clone distribution: NC1-CGAP clone distribution information can be  
 found through the I.M.A.G.E. Consortium/LLNL at:  
[www.bio.lnl.gov/bbrp/image/image.html](http://www.bio.lnl.gov/bbrp/image/image.html)Trace considered overall poor quality  
 Seq primer: -40bp from Gibco  
 High quality sequence stop: 1.  
 Location/Qualifiers

1..43

/organism "Homo sapiens"

/db\_xref="taxon:9606"

/clone="IMAGE:2098325"

/clone\_lib "NC1-CGAP\_Brn23"

/tissue\_type="glioblastoma (pooled)"

/lab\_host="tbl08"

/note "organ: brain; Vector: p1713D-Pac (Pharmacia) with a  
 modified polylinker; Site\_1: Not 1; Site\_2: Eco RI; 1st  
 strand cDNA was primed with a Not 1 - oligo(dT) primer [5].

FEATURES

source

1..43

/organism "Homo sapiens"

/db\_xref="taxon:9606"

/clone="IMAGE:2098325"

/clone\_lib "NC1-CGAP\_Brn23"

/tissue\_type="glioblastoma (pooled)"

/lab\_host="tbl08"

/note "organ: brain; Vector: p1713D-Pac (Pharmacia) with a  
 modified polylinker; Site\_1: Not 1; Site\_2: Eco RI; 1st  
 strand cDNA was primed with a Not 1 - oligo(dT) primer [5].

TCCTTACCAATCGAATGGAGGCGGCGAATGCTTTTCTTTTCTTTT  
 T 3'; double-stranded cDNA was ligated to Eco RI  
 adaptors (Pharmacia), digested with Not 1 and cloned into  
 the Not 1 and Eco RI sites of the modified p1713 vector.  
 Library is normalized, and was constructed by Bento  
 Soares and M.Fatima Bonaldo."

BASE COUNT 4 a 17 c 17 q 5 t  
 ORIGIN

Query Match 69.0%; Score 13.8; DB 9; Length 43;  
 Best Local Similarity 88.2%; Pred. No. 1.4e+05;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 GGGTGGATGCGGAGG 19

TTTT TTTTTTTTTT

Tb 6 GGGTGGATGCGGAGG 22

## RESULT 4

A1089757

LOCUS

DEFINITION A1089757 40 bp mRNA linear EST 18-AUG-1998  
 similar to SW:PRPH\_HUMAN P02814 PROLINE-RICH PEPTIDE P-R. contains  
 MER22.1b3 IARI repetitive element ;, mRNA sequence.

A1089757

VERSION A1089757.1 GI:3428816

KEYWORDS

SOURCE

ORGANISM

human.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 40)

NC1/NINDS-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.National Cancer Institute / National Institute of Neurological  
 Disorders and Stroke, Brain Tumor Genome Anatomy Project  
 (CGAP/HTGAP), Tumor Gene Index

Unpublished (1998)

Contact: Robert Strausberg, Ph.D.  
 Email: [capbs-r@mail.nih.gov](mailto:capbs-r@mail.nih.gov)Tissue Procurement: David N. Louis, M.D., Myrna K. Rosenfeld M.D.,  
 Ph.D.cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima  
 Bonaldo, Ph.D.

cDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center  
 clone distribution: NC1-CGAP clone distribution information can be  
 found through the I.M.A.G.E. Consortium/LLNL at:  
[www.bio.lnl.gov/bbrp/image/image.html](http://www.bio.lnl.gov/bbrp/image/image.html)Trace considered overall poor quality  
 Seq primer: -40bp from Gibco  
 High quality sequence stop: 1.  
 Location/Qualifiers

1..40

/organism "Homo sapiens"

/db\_xref="taxon:9606"

/clone="IMAGE:1687516"

/clone\_lib "NC1-CGAP\_Brn23"

/tissue\_type="glioblastoma (pooled)"

/lab\_host="tbl08"

/note "organ: brain; Vector: p1713D-Pac (Pharmacia) with a  
 modified polylinker; Site\_1: Not 1; Site\_2: Eco RI; 1st  
 strand cDNA was primed with a Not 1 - oligo(dT) primer [5].

FEATURES

source

1..40

/organism "Homo sapiens"

/db\_xref="taxon:9606"

/clone="IMAGE:1687516"

/clone\_lib "NC1-CGAP\_Brn23"

/tissue\_type="glioblastoma (pooled)"

/lab\_host="tbl08"

/note "organ: brain; Vector: p1713D-Pac (Pharmacia) with a  
 modified polylinker; Site\_1: Not 1; Site\_2: Eco RI; 1st  
 strand cDNA was primed with a Not 1 - oligo(dT) primer [5].

BASE COUNT 7 a 9 c 24 q 0 t

ORIGIN

Query Match 68.0%; Score 13.6; DB 9; Length 43;





```

High quality sequence step: 42.
location/Qualifiers
  1..42
    /organism "Homo sapiens"
    /db_xref="taxon:9606"
    /clone "IMAGE:4952119"
    /clone_lib="NH_M06_9"
    /tissue_type="adipocarcinoma cell line"
    /lab_host="D410B (phage-resistant)"
    /note="Organ: ovary; Vector: pOTB7; Site: 1; XhoI: site_2;
    EcoRI: cDNA made by oligo-dT priming. Directionally
    cloned into EcoRI/XhoI sites using the following 5'
    adaptor: GCCAGGAG(G). Size-selected >500bp for average
    insert size 1.8kb. Library constructed by Ling Hong in
    the laboratory of Gerald M. Rubin (University of
    California, Berkeley) using ZAP-cDNA synthesis kit
    (Stratagene) and Superscript II RT (Life Technologies)."
```

BASE COUNT: 8 a 10 c 18 g 6 t

ORIGIN

```

Query Match: 66.08; Score 13.2; DB 12; Length 42;
Best Local Similarity: 83.48; Pred. No. 2.4e+05;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

QY 1 CAGGAGGAGATGAGGAG 18

DB 7 CAGGAGGAGATGAGGAG 24

---

```

RESULT 8
AZ802167
LOCUS
DEFINITION
  20 bp DNA linear GSS 16-FEB-2001
  2M0061A07 Mouse 10kb plasmid M03C1M library Mus musculus genomic
  clone U00C2M0061A07 F. DNA sequence.
ACCESSION
  AZ802167
VERSION
  AZ802167.1 GI:12954586
KEYWORDS
  GSS.
SOURCE
  house mouse.
  Mus musculus.
ORGANISM
  Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
  1 (bases 1 to 20)
AUTHORS
  Dunn,D., Aoyagi,A., Barber,M., Bearcorn,T., Duval,B., Hamil,C.,
  Islam,H., Loncaric,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
  ,M., Rose,M., Rose,R., Stokes,R., Timney,A., von Niederhausern,A.
  and Wright,D., Weiss,R.
  Mouse whole genome scaffolding with paired end reads from 10kb
  plasmid inserts
  Unpublished (2000)
  Contact: Robert B. Weiss
  University of Utah Genome Center
  University of Utah
  Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2040 E., SLG, UT
  84112, USA
  Tel: 801 585 5606
  Fax: 801 585 7177
  Email: dbum@genetics.utah.edu
  Insert length: 10000 Std Error: 0.00
  Plates: 061 rows: A columns: 07
  Seq primer: CGTGTAAACGACGGAG
  Class: plasmid ends
  High quality sequence step: 20.
  location/Qualifiers
    1..20
      /organism "Mus musculus"
      /strain "C57BL/6J"
      /db_xref="taxon:10090"
      /clone "U00C2M0061A07"
      /clone_lib="Mouse 10kb plasmid M03C1M library"
      /sex "Male"
      /lab_host="E. Coli strain XL10-Gold, 11-resistant, F-"
      /note "Vector: pW42nv; Purified genomic DNA from M.
      musculus C57BL/6J (male) was obtained from the Jackson
```

---

Laboratory Mouse DNA Resource  
(<http://www.jax.org/resources/documents/dnares/>). The DNA  
was hydrodynamically sheared by repeated passage through a  
0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end-repaired with T4 DNA polymerase and 14  
polynucleotide kinase. Adaptor oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adapted DNA was purified and size-selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of pMD42 (q114732114) (pAF129072.1), a copy-number  
inducible derivative of plasmid R1. The vector was ligated  
with adaptors complementary to the insert adaptors and  
purified. The sheared, adapted mouse DNA was annealed to  
adapted vector DNA, and transformed into  
chemically-competent E. coli XL10 Gold (Stratagene) cells  
and selected for ampicillin resistance."

BASE COUNT: 2 a 1 c 14 g 3 t

ORIGIN

```

Query Match: 64.08; Score 12.8; DB 17; Length 20;
Best Local Similarity: 87.58; Pred. No. 3.3e+05;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

QY 3 GGGGAGATGGGGAG 18

DB 4 GGGGAGATGGGGAG 19

---

```

RESULT 9
AZ465667
LOCUS
DEFINITION
  27 bp DNA linear GSS 04-APR-2000
  1M0275017R Mouse 10kb plasmid M03C1M library Mus musculus genomic
  clone U00C1M0275017 R. DNA sequence.
ACCESSION
  AZ465667
VERSION
  AZ465667.1 GI:10923788
KEYWORDS
  GSS.
SOURCE
  house mouse.
  Mus musculus.
ORGANISM
  Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
  1 (bases 1 to 27)
AUTHORS
  Dunn,D., Aoyagi,A., Barber,M., Bearcorn,T., Duval,B., Hamil,C.,
  Islam,H., Loncaric,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
  ,M., Rose,M., Rose,R., Stokes,R., Timney,A., von Niederhausern,A.
  and Wright,D., Weiss,R.
  Mouse whole genome scaffolding with paired end reads from 10kb
  plasmid inserts
  Unpublished (2000)
  Contact: Robert B. Weiss
  University of Utah Genome Center
  University of Utah
  Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2040 E., SLG, UT
  84112, USA
  Tel: 801 585 5606
  Fax: 801 585 7177
  Email: dbum@genetics.utah.edu
  Insert length: 10000 Std Error: 0.00
  Plates: 0275 rows: C columns: 17
  Seq primer: CACACAGGAGACGATGAC
  Class: plasmid ends
  High quality sequence step: 27.
  location/Qualifiers
    1..27
      /organism "Mus musculus"
      /strain "C57BL/6J"
      /db_xref="taxon:10090"
      /clone "U00C1M0275017"
      /clone_lib="Mouse 10kb plasmid M03C1M library"
      /sex "Male"
      /lab_host="E. Coli strain XL10-Gold, 11-resistant, F-"
      /note "Vector: pW42nv; Purified genomic DNA from M.
      musculus C57BL/6J (male) was obtained from the Jackson
```

Laboratory Mouse DNA Resource  
(<http://www.fax.org/resources/documents/docs/>). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt and repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD2 (ql1474114[blat/29072.1]), a copy-number inducible derivative of plasmid  $\lambda$ 1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically-competent *E. coli* XL10-Gold (Stratagene) cells and selected for ampicillin resistance." 5 a 2 c 16 g 4

| BASE COUNT            | 5   | 3              | 2  | 6          | 16    | 9      | 4  | 1    |
|-----------------------|-----|----------------|----|------------|-------|--------|----|------|
| ORIGIN                |     |                |    |            |       |        |    |      |
| Query Match           |     |                |    |            | 64.0% |        |    |      |
| Best local Similarity |     |                |    |            | 87.5% |        |    |      |
| Matches               | 14; | conservative   | 0; | Mismatches | 2;    | Indels | 0; | Gaps |
| QY                    | 4   | GGGATGATGGGAGG | 19 |            |       |        |    |      |
| DE                    | 3   | GGTGGATGATGGG  | 18 |            |       |        |    |      |

Laboratory Mouse DNA Resource (<http://www.jax.org/resources/elements/index/>). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt and repaired with 14 DNA polymerase and T4 polynucleotide kinase. Adapted clonematched lines were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD2 (414/214/404/AP23072.1), a copy number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically competent *E. coli* XL10 gold (Stratagene) cells and selected for ampicillin resistance.<sup>16</sup>

| BASE COUNT            | 6  | a               | 1  | c          | 17 | q      | 5                  | 4          |   |
|-----------------------|----|-----------------|----|------------|----|--------|--------------------|------------|---|
| ORIGIN                |    |                 |    |            |    |        |                    |            |   |
| Query Match           |    |                 |    | 64.0%      |    |        | DB 17              | Length 299 |   |
| Best Local Similarity |    |                 |    | 87.5%      |    |        | Prod. No. 6,400,05 |            |   |
| Matches               | 14 | Conservative    | 0  | Mismatches | 2  | Indels | 0                  | Gaps       | 0 |
| QY                    | 4  | GGGATATGAGGAGG  | 19 |            |    |        |                    |            |   |
|                       |    | 111111111111    |    |            |    |        |                    |            |   |
|                       |    | 1GGGATATGAGGAGG | 16 |            |    |        |                    |            |   |

| FEATURES  | Location/Qualities   | Source |
|-----------|--|--------|
| polyA 30s | 1, 346   |        |
|           | Localization "Homo sapiens"  |        |
|           | Localization "human"   |        |
|           | Gene xref "L100019606"   |        |
|           | Gene "TM6SF2043655"  |        |
|           | Gene lib "Stores total tetus N24288 9W"  |        |
|           | Gene stat "8 9 weeks"  |        |
|           | Lab host "E.coli"  |        |
|           | Vec "Vector: pTZ19 Par (Chloramphenicol) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; 1st strand cDNA was prepared from mRNA obtained from pooled R 9 week (total) tetus material with a Not I - cldp(GAT) primer 157 bp: ATGAGATGAGTGGAGGAGGCTAAATTTTTTTTTTTT 3'. |        |
|           | Vec "Stranded cDNA was ligated to Eco RI adaptors (Chromaria), digested with Not I and cloned into the Not I and Eco RI sites of the modified pTZ19 vector. Library went through one round of normalization and was  |        |

```

BASE COUNT      13 a      10 c      19 g      4 t
ORIGIN
Query Match:      64.0%; Score 12.8; DB 9; Length 46;
Best Local Similarity 87.5%; Pred. No. 3,9e+05;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GAGGACAGGAGGAGG 19
|||||
DB 7 GAGGACAGGAGGAGG 22

RESULT 12
AL644703
LOCUS      AL644703      50 bp      mRNA      Linear      EST 07-Nov-2001
DEFINITION AL644703 XGC-gastrula Silurana tropicalis cDNA clone UG2109 5',
mRNA sequence.
ACCESSION AL644703
VERSION AL644703.1 GI:16745828
KEYWORDS EST.
SOURCE      Western clawed frog.
ORGANISM Silurana tropicalis
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;
Xenopodinae; Silurana.
REFERENCE 1 (bases 1 to 50)
AUTHORS Buckle, E., Taylor, R., Ashurst, J.L., Zorn, A.M. and Rogers, J.
TITLE      Sauger Xenopus tropicalis EST project 2001
JOURNAL   Unpublished (2001)
COMMENT   Contact: Buckle E
Sanger Centre
Hinxton, Cambridgeshire, CB10 1SA, UK
Email: tropesanger.ac.uk
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE_ID: UG2109.plc
Sequencing primer: PLC
This sequence is from a Xenopus Gene Collection (XGC) library
constructed by Aaron M. Zorn.
FEATURES
Location/Qualifiers
1..50
1 a      9 c      21 g      12 t
ORIGIN
Query Match:      64.0%; Score 12.8; DB 9; Length 50;
Best Local Similarity 87.5%; Pred. No. 3,2e+05;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 GAGGACAGGAGGAGG 20
|||||
DB 6 GAGGACAGGAGGAGG 49

RESULT 13
AZ969578
LOCUS      AZ969578      21 bp      DNA      Linear      GSS 27 APR 2001
DEFINITION ZMO242G20F Mouse 10kb plasmid 00632M library Mus musculus genomic
clone 00632M0242520 F. DNA sequence.
ACCESSION AZ969578
VERSION AZ969578.1 GI:14840805
KEYWORDS GSS.
SOURCE      house mouse.

```

---

```

ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurostomatia; Muridae; Murinae; Mus.
1 (bases 1 to 21)
AUTHORS Iwamoto, Ayumi, A., Barber, M., Beccorn, T., Juvall, B., Hamill, C.,
Islam, H., Imdad, S., Mahmood, M., Mooney, E., Pedersen, J., Kelly,
M., Resc, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A.,
and Wright, D., Weiss, R.
TITLE      Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL   Unpublished (2000)
COMMENT   Contact: Robert B. Weiss
University of Utah Genome Center
Rm. 406, Biomedical Polymers Research Bldg., 20 S. 2040 E., Salt. City
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dunn@genome.utah.edu
Insert length: 10000 Std Error: 0.09
Plate: 0.42 row: G column: 20
Seq primer: GTGTGAAAAGACGATCAGT
Class: plasmid ends
High quality sequence step: 21.
Location/Qualifiers
1..21
1 a      18 c      0 g      2 t
ORIGIN
Query Match:      63.0%; Score 12.6; DB 17; Length 21;
Best Local Similarity 78.9%; Pred. No. 3,9e+05;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGACAGGAGGAGG 19
|||||
DB 20 GAGGACAGGAGGAGG 2

RESULT 14
AZ971899
LOCUS      AZ971899      25 bp      mRNA      Linear      EST 27-Nov-1999
DEFINITION WZ2404. x1 NCL3GAP row 18 Homo sapiens cDNA IMAGE:253099.47
similar to TR061144 061144 SP85; contains MSK1.b2 MSK1 repetitive
element; mRNA sequence.
ACCESSION AZ971899
VERSION AZ971899.1 GI:5768725
KEYWORDS EST.

```

---

```

ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurostomatia; Muridae; Murinae; Mus.
1 (bases 1 to 21)
AUTHORS Iwamoto, Ayumi, A., Barber, M., Beccorn, T., Juvall, B., Hamill, C.,
Islam, H., Imdad, S., Mahmood, M., Mooney, E., Pedersen, J., Kelly,
M., Resc, M., Rose, R., Stokes, R., Tinney, A., von Niederhausern, A.,
and Wright, D., Weiss, R.
TITLE      Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL   Unpublished (2000)
COMMENT   Contact: Robert B. Weiss
University of Utah Genome Center
Rm. 406, Biomedical Polymers Research Bldg., 20 S. 2040 E., Salt. City
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dunn@genome.utah.edu
Insert length: 10000 Std Error: 0.09
Plate: 0.42 row: G column: 20
Seq primer: GTGTGAAAAGACGATCAGT
Class: plasmid ends
High quality sequence step: 21.
Location/Qualifiers
1..21
1 a      18 c      0 g      2 t
ORIGIN
Query Match:      63.0%; Score 12.6; DB 17; Length 21;
Best Local Similarity 78.9%; Pred. No. 3,9e+05;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGACAGGAGGAGG 19
|||||
DB 20 GAGGACAGGAGGAGG 2

RESULT 14
AZ971899
LOCUS      AZ971899      25 bp      mRNA      Linear      EST 27-Nov-1999
DEFINITION WZ2404. x1 NCL3GAP row 18 Homo sapiens cDNA IMAGE:253099.47
similar to TR061144 061144 SP85; contains MSK1.b2 MSK1 repetitive
element; mRNA sequence.
ACCESSION AZ971899
VERSION AZ971899.1 GI:5768725
KEYWORDS EST.

```

**SOURCE**  
ORGANISM Human.  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.  
1 (bases 1 to 25)  
**REFERENCE**  
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.  
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP).  
Tumor Gene Index  
**JOURNAL**  
Unpublished (1997)  
**COMMENT**  
Contact: Robert Strausberg, Ph.D.  
Email: [cap@nci.nih.gov](mailto:cap@nci.nih.gov)  
Tissue Procurement: Christopher A. Moskaluk, M.D., Ph.D., Michael  
R. Emmert-Buck, M.D., Ph.D. cDNA Library Preparation: M. Bento  
Soares, Ph.D. cDNA Library Arrayed by: Christa Prange, The  
I.M.A.G.E. Consortium DNA Sequencing by: Washington University  
Genome Sequencing Center  
Clone Distribution: NCI CGAP clone distribution information can be  
found through the I.M.A.G.E. Consortium/URL at:  
[www.bio.fda.gov/bftp/image/imap.html](http://www.bio.fda.gov/bftp/image/imap.html)

Trace considered overall poor quality  
Seq primer: 40bp from Gibco  
High quality sequence stop: 1.  
Location/Qualifiers  
1..25

**SOURCE**

ORGANISM "Homo sapiens"  
/db\_xref "taxon:9606"  
/clone "IMAGE:2530999"  
/clone.lib "NCI CGAP ov18"  
/issue\_type "fibroblast"  
/note "organ: ovary; Vector: pT710-Pac (Pharmacia) with a  
modified polylinker; Site 1: Not 1; Site 2: Eco RI; 1st  
strand cDNA was primed with a Not 1-oligo(dT) primer [5']  
TGTCACATCTCAAGTCGACGAGCGCGCGACATTTTCTTTT 3');  
double-stranded cDNA was ligated to Eco RI adaptors  
(Pharmacia), digested with Not 1 and cloned into the Not  
1 and Eco RI sites of the modified pT714 vector. Library  
went through one round of normalization, and was  
constructed by Bento Soares and M. Fatima Bonaldo."

BASE COUNT 6 a 0 c 18 q 1 1  
ORIGIN

Query Match 63.0%; Score 12.6; DB 9; Length 25;  
Best Local Similarity 78.9%; Pred. No. 3.9e+05;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGGGAGTATGGGAGG 19  
TTTT TT TTTTT T  
DB 6 GAGGTCGAAAGGAGGAGG 24

**RESULT 15**  
AZ588957  
LOCUS AZ588957 40 bp DNA Linear GSS 13 DEC 2000  
DEFINITION D037B08R Mouse 10kb plasmid D037B library Mus musculus genomic  
clone D037B08R R. DNA sequence.  
ACCESSION AZ588957  
VERSION AZ588957.1 GI:11711147  
KEYWORDS GSS.  
SOURCE house mouse.  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.

1 (bases 1 to 40)  
**REFERENCE**  
AUTHORS Dunn, D., Ayad, A., Barber, M., Reventon, L., Dupal, R., Hamill, C.,  
Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly,  
M., Rose, M., Rose, R., Stokes, R., Timney, A., von Niederhausern, A.,  
and Wright, D., Weiss, R.  
TITLE Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
**JOURNAL**  
Unpublished (2000)  
**COMMENT**  
Contact: Robert R. Weiss

University of Utah Genome Center  
University of Utah  
RM. 408, Biomedical Polymers Research Bldg., 20 S. 2000 E., Ste. 01  
84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: [ddm@genetics.utah.edu](mailto:ddm@genetics.utah.edu)  
Insert Length: 10000 Std Error: 0.00  
Plate: 0597 Row: B Column: 08  
Seq primer: CAWAGCAACACGTAAGAC  
Class: plasmid ends  
High quality sequence stop: 40.  
Location/Qualifiers  
1..40

**FEATURES**

## SOURCE

ORGANISM "Mus musculus"  
/strain "C57BL/6J"  
/db\_xref "taxon:10090"  
/clone "D037B08R"  
/clone.lib "Mouse 10kb plasmid D037B library"  
/sex "Male"  
/lab\_host "E. coli strain XL10 gold, 11 resistant, F"  
/note "Vector: pMD20V; Purified genomic DNA from M.  
musculus C57BL/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource  
(<http://www.jax.org/resources/documents/shares/>). The DNA  
was hydridynamically sheared by repeated passage through a  
0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end repaired with 14 DNA polymerase and 14  
poly-nucleotide kinase. Adaptor oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adaptor DNA was purified and size selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of pMD2 (G14732114) (pAF129072.1), a copy number  
inducible derivative of plasmid R1. The vector was ligated  
with adaptors complementary to the insert adaptors and  
purified. The sheared, adaptor mouse DNA was annealed to  
adaptor vector DNA, and transformed into  
chemically competent E. coli XL10 Gold (Stratagene) cells  
and selected for ampicillin resistance."

BASE COUNT 1 a 25 c 1 q 4 1  
ORIGIN

Query Match 63.0%; Score 12.6; DB 17; Length 40;  
Best Local Similarity 78.9%; Pred. No. 3.9e+05;  
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGGGAGTATGGGAGG 19  
TTTT TT TTTTT T  
DB 22 GAGGTCGAAAGGAGGAGG 4

**RESULT 16**  
AZ588958  
LOCUS AZ588958 42 bp DNA Linear GSS 29 SEP 2000  
DEFINITION D037B08R Mouse 10kb plasmid D037B library Mus musculus genomic  
clone D037B08R R. DNA sequence.  
ACCESSION AZ588958  
VERSION AZ588958.1 GI:10414705  
KEYWORDS GSS.  
SOURCE house mouse.  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.

1 (bases 1 to 42)  
**REFERENCE**  
AUTHORS Dunn, D., Ayad, A., Barber, M., Reventon, L., Dupal, R., Hamill, C.,  
Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly,  
M., Rose, M., Rose, R., Stokes, R., Timney, A., von Niederhausern, A.,  
and Wright, D., Weiss, R.  
TITLE Mouse whole genome scaffolding with paired end reads from 10kb  
plasmid inserts  
**JOURNAL**  
Unpublished (2000)  
**COMMENT**  
Contact: Robert R. Weiss

University of Utah Genome Center  
 Em. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLIC, UT  
 84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: dhann-genetics.utah.edu  
 Insert length: 10000 Std Error: 0.00  
 Plate: 0071 row: F column: 11  
 Seq primer: CACACAGCAAGACGCTATGACG  
 Class: plasmid ends  
 High quality sequence stop: 32.  
 Location/Qualifiers  
 1..32  
 /organism="Mus musculus"  
 /strain="C57Bl/6J"  
 /db\_xref="taxon:10090"  
 /clone="M0061M007F11"  
 /clone\_lib="Mouse 10kb plasmid M0061M library"  
 /sex="Male"  
 /lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
 /note="Vector: pMD29; Purified genomic DNA from M.  
 musculus C57Bl/6J (male) was obtained from the Jackson  
 Laboratory Mouse DNA Resource  
 (http://www.jax.org/resources/documents/dnares/). The DNA  
 was hydrodynamically sheared by repeated passage through a  
 0.005 inch orifice at constant velocity. The sheared DNA  
 was blunt end-repaired with T4 DNA polymerase and T4  
 polynucleotide kinase. Adaptor oligonucleotides were  
 ligated to the blunt ends in high molar excess. The  
 adaptor DNA was purified and size-selected for a 9.5 to  
 10.5 kb range using preparative agarose gel  
 electrophoresis. Vector DNA was prepared from a derivative  
 of pMD24 (q14732114|gb|AF129072.1), a copy-number  
 inducible derivative of plasmid R1. The vector was ligated  
 with adaptors complementary to the insert adaptors and  
 purified. The sheared, adaptor mouse DNA was annealed to  
 adaptor vector DNA, and transformed into  
 chemically-competent E. coli XL10-Gold (Stratagene) cells  
 and selected for ampicillin resistance."

0 a 2 c 30 q 0 t

BASE COUNT  
 ORIGIN

Query Match 63.0%; Score 12.6; DB 17; Length 32;  
 Best Local Similarity 78.9%; Pred. No. 3.9e+05;  
 Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGCGGCATCGGGGAGG 19  
 1 |111111 1111 11  
 Db 4 GAGGCGGCAGGGGGGGGG 21

RESULT 17  
 BF184963

DEFINITION  
 601843455F1 NIH\_MGC\_54 Homo sapiens cDNA clone IMAGE:4064436 5',  
 mRNA sequence.

ACCESSION  
 BF184963

VERSION  
 BF184963.1 GI:11063484

KEYWORDS  
 EST.

SOURCE  
 human.

ORGANISM  
 Homo sapiens  
 Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.

REFERENCE  
 1 (bases 1 to 33)  
 NIH-MGC <http://mhc.ncbi.nlm.nih.gov/>.  
 National Institutes of Health, Mammalian Gene Collection (MGC)  
 Unpublished (1999)  
 Contact: Robert Strausberg, Ph.D.  
 Email: [cuaphs-r@mail.nih.gov](mailto:cuaphs-r@mail.nih.gov)  
 Tissue Procurement: ATCC

AUTHORS  
 cDNA Library Preparation: CLONETECH Laboratories, Inc.  
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

```

/strain "c57BL/6J"
/Ab xref "taxon:10090"
/clone "003720184024"
/clone lib "Mouse 10kb plasmid 00372M library"
/sex "Female"
/lab_host "E. coli strain XL10 Gold, T1 resistant, F'"
/note "Vector: pMD42nv; Purified genomic DNA from M. musculus c57BL/6J (female) was obtained from the Jackson Laboratory Mouse DNA Resource. (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with 14 DNA polymerase and 14 polynucleotide kinase. Adapter oligonucleotides were ligated to the blunt ends in high molar excess. The adapter DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (q114742114) (bAP129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptered mouse DNA was annealed to adaptered vector DNA, and transformed into chemically-competent E. coli XL10 Gold (Stratagene) cells and selected for ampicillin resistance."
BASE COUNT      5  4      2  5  4      4  1
CGTCTT

Query Match      63.0%; Score 12.6; DB 17; Length 46;
Best Local Similarity 78.9%; Pred. No. 3,80005;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGAGGAGGAGGAGGAGG 19
   1 111 111 111 111 111

DB 9 GAGGAGGAGGAGGAGGAGG 27
   1 111 111 111 111 111

RESULT 19
AZ871856/c
LOCUS      AZ871856      47 bp      DNA      linear      GSS      21 FEB-2001
DEFINITION      280184024R Mouse 10kb plasmid 00372M library Mus musculus genomic
clone 003720184024 R, DNA sequence.
ACCESSION      AZ871856
VERSION      AZ871856.1  GI:14078474
KEYWORDS      GSS.
SOURCE      house mouse.
ORGANISM      Mus musculus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
1 (bases 1 to 47)
AUTHORS      Dunn, D., Ayoub, A., Barber, M., Beacorn, F., Duvall, B., Hamblin, C.,
Islam, H., Lonnaker, S., Mahmood, M., Meehan, E., Pedersen, L., Peilly
M., Rose, M., Rose, R., Stokes, R., Timney, A., von Niederhausern, A.,
and Wright, D., Weiss, R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
CONTACT      Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2040 E., SLG, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dbm@geneset.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0184 Row: 9 Column: 24
Seq primer: CAGCAGCAAAAGACTATGAG
Class: plasmid ends
High quality sequence step: 47.
Location/Qualifiers
1..47
/organism "Mus musculus"
SOURCE

```

```

/strain "c57BL/6J"
/Ab xref "taxon:10090"
/clone "003720184024"
/clone lib "Mouse 10kb plasmid 00372M library"
/sex "Male"
/lab_host "E. coli strain XL10 Gold, T1 resistant, F'"
/note "Vector: pMD42nv; Purified genomic DNA from M. musculus c57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource. (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with 14 DNA polymerase and 14 polynucleotide kinase. Adapter oligonucleotides were ligated to the blunt ends in high molar excess. The adapter DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD42 (q114742114) (bAP129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptered mouse DNA was annealed to adaptered vector DNA, and transformed into chemically-competent E. coli XL10 Gold (Stratagene) cells and selected for ampicillin resistance."
BASE COUNT      5  4      1  4      0  1
CGTCTT

Query Match      63.0%; Score 12.6; DB 17; Length 47;
Best Local Similarity 78.9%; Pred. No. 3,80005;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGAGGAGGAGGAGGAGG 19
   1 111 111 111 111 111

DB 27 GAGGAGGAGGAGGAGGAGG 9
   1 111 111 111 111 111

RESULT 20
AZ800472/c
LOCUS      AZ800472      48 bp      DNA      linear      GSS      05 OCT-2000
DEFINITION      18068011R Mouse 10kb plasmid 00371M library Mus musculus genomic
clone 003710040011 R, DNA sequence.
ACCESSION      AZ800472
VERSION      AZ800472.1  GI:10680122
KEYWORDS      GSS.
SOURCE      house mouse.
ORGANISM      Mus musculus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
1 (bases 1 to 48)
AUTHORS      Dunn, D., Ayoub, A., Barber, M., Beacorn, F., Duvall, B., Hamblin, C.,
Islam, H., Lonnaker, S., Mahmood, M., Meehan, E., Pedersen, L., Peilly
M., Rose, M., Rose, R., Stokes, R., Timney, A., von Niederhausern, A.,
and Wright, D., Weiss, R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
CONTACT      Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2040 E., SLG, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: dbm@geneset.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0184 Row: 9 Column: 11
Seq primer: CAGCAGCAAAAGACTATGAG
Class: plasmid ends
High quality sequence step: 48.
Location/Qualifiers
1..48
/organism "Mus musculus"
SOURCE

```

```

/strain-"C57BL/6J"
/db_xref-"taxon:10090"
/clone-"MGC:1M0396001"
/clone_lib-"Mouse 10kb plasmid UUCG1M library"
/sex-"Male"
/lab_host-"E. Coli strain XL10-Gold, T1-resistant, F-"
/notes-"Vector: pMD29v; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD29 (g1147321141qblAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
BASE COUNT      0 a      36 c      2 g      0 t
ORIGIN

Query Match      64.0%; Score 12.6; DB 17; Length 48;
Best Local Similarity 78.9%; Pred. No. 3.8e+05;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1 GAGGGAGGATCGGGAGG 19
        | | | | | | | | | | | | | | | |
Db      26 GGGGGGGGGGGGGGGGG 8

RESULT 21
AZ588432/c
LOCUS      AZ588432      39 bp      DNA      linear      GSS      13-DEC-2000
DEFINITION      1M0396001R Mouse 10kb plasmid UUCG1M library Mus musculus genomic clone UUCG1M0396001 R, DNA sequence.
ACCESSION      AZ588432
VERSION      AZ588332.1      GI:11710522
KEYWORDS      GSS.
SOURCE      house mouse.
ORGANISM      Mus musculus
REFERENCE      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
AUTHORS      Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmood,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A., and Wright,D., Weiss,R.
TITLE      Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts
JOURNAL      Unpublished (2000)
COMMENT      Contact: Robert R. Weiss
            University of Utah Genome Center
            University of Utah
            Rm. 308, Biomedical
            84112, USA
            Tel: 801 585 5606
            Fax: 801 585 7177
            Email: dunn@genetics.utah.edu
            Insert length: 10000      Std Error: 0.00
            Plate: 0496      row: 0      column: 01
            Seq primer: CACACAGCAACACGATGAC
            Class: plasmid ends
            High quality sequence stop: 39.
FEATURES
            location/Qualifiers
            1..39
            /organism="Mus musculus"

```

```

/strain-"C57BL/6J"
/db_xref-"taxon:10090"
/clone-"MGC:1M0396001"
/clone_lib-"Mouse 10kb plasmid UUCG1M library"
/sex-"Male"
/lab_host-"E. Coli strain XL10-Gold, T1-resistant, F-"
/notes-"Vector: pMD29v; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pMD29 (g1147321141qblAF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
BASE COUNT      0 a      27 c      2 g      10 t
ORIGIN

Query Match      63.0%; Score 12.6; DB 17; Length 39;
Best Local Similarity 78.9%; Pred. No. 3.8e+05;
Matches 15; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      1 GAGGGAGGATCGGGAGG 19
        | | | | | | | | | | | | | | | |
Db      34 GAGGGAGGAGGAGGAGG 16

RESULT 22
AZ55828/c
LOCUS      AZ55828      43 bp      mRNA      linear      EST      15-FEB-1999
DEFINITION      qu02b05.x1 NCL-CGAP-Col4 Homo sapiens cDNA clone IMAGE:1964569.4, similar to WP:122D1.2 CE17246 ; contains element MSK1 repetitive element ;, mRNA sequence.
ACCESSION      AZ55828
VERSION      AZ55828.1      GI:4095981
KEYWORDS      EST.
SOURCE      human.
ORGANISM      Homo sapiens
REFERENCE      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
AUTHORS      1 (bases 1 to 43)
            NCL-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
TITLE      National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
JOURNAL      Unpublished (1997)
COMMENT      Contact: Robert Strausberg, Ph.D.
            Email: cgaps@mail.nih.gov
            Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R. Emmert-Buck, M.D., Ph.D.
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: Greg Lennon, Ph.D.
            DNA Sequencing by: Washington University Genome Sequencing Center
            Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
            www.biol.llnl.gov/bbrp/image/image.html
Trace considered overall poor quality
Insert length: 518      Std Error: 0.00
Seq primer: -400p from Gibco
High quality sequence stop: 1.
FEATURES
            location/Qualifiers
            1..43
            /organism="Homo sapiens"

```

```

/ab_xref "taxon:9606"
/clone_lib "MAGE:1963569"
/clone_lib "NCI-CGAP:Col4"
/assay_type "moderately-differentiated adenocarcinoma"
/lab_host "DH10B"
/notes "organ: colon; Vector: pCMV-Sport6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: oligo dT.
Average insert size 1.7 kb. Life Technologies catalog #:
11541-019"
BASE COUNT      9 4      21 4      1 1
ORIGIN
      63.0%;   Score 12.6;   DB 9;   Length 43;
      78.9%;   Pred. No. 4,86,05;
      1%;   Conservative 0;   Mismatches 4;   Indels 0;   Gaps 0;

QY  1  GAAGGAGGATGGGAGG 19
      1 111111111111111111
DB   36  GAGGAGGAGGAGGAGG 18

RESULT 24
AZ848760/c
LOCUS      43 bp      DNA      linear      GSS 21-FEB-2001
DEFINITION      ZMO149G24R Mouse 10kb plasmid DRR1M Library Mus musculus genomic
clone 0003280149G24 R; DNA sequence.
ACCESSION      AZ848760
VERSION      AZ848760.1  GI:114042159
KEYWORDS      GSS.
SOURCE      house mouse.
ORGANISM      Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
1 (bases 1 to 43)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,R., Hamill,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.
and Wright,D., Weiss,R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert R. Weiss
University of Utah Genome Center
Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2040 E., Salt, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000   Std Error: 0.00
Plate: 0149   row: G   column: 24
Seq primer: CACACAGGAAAACAGTATGAT
Class: plasmid ends
High quality sequence stop: 43.
Location/Qualifiers
  1..24
  /organism "Mus musculus"
  /strain "c57BL/6J"
  /ab_xref "taxon:10090"
  /clone "0003280149G24"
  /clone_lib "Mouse 10kb plasmid DRR1M Library"
  /sex "Male"
  /lab_host "E. coli strain XL10 Gold, 11 resistant, F'"
  /note "Vector: pMD29v; Purified genomic DNA from M.
musculus c57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and 14
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adapted DNA was purified and size-selected for a 9.5 to

```

```

10.5 kb range using preparative agarose gel
electrophoresis. Vector DNA was prepared from a derivative
of pMD2 (q14742114[qlAF12902.1]), a copy number
inducible derivative of plasmid p1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adaptor-tailed mouse DNA was amplified to
adapted vector DNA, and transformed into
chemically competent E. coli XL10 Gold (Sratomex) cells
and selected for ampicillin resistance."
BASE COUNT      1 4      40 4      1 4      1 1
ORIGIN
      63.0%;   Score 12.6;   DB 17;   Length 43;
      78.9%;   Pred. No. 4,86,05;
      1%;   Conservative 0;   Mismatches 4;   Indels 0;   Gaps 0;

QY  1  GAAGGAGGATGGGAGG 19
      1 111111111111111111
DB   34  GAGGAGGAGGAGGAGG 16

RESULT 24
AZ963145
LOCUS      48 bp      DNA      linear      GSS 27-APR-2001
DEFINITION      ZMO242H0RF Mouse 10kb plasmid 00032M Library Mus musculus genomic
clone 00032M0242H0R F; DNA sequence.
ACCESSION      AZ963145
VERSION      AZ963145.1  GI:11484372
KEYWORDS      GSS.
SOURCE      house mouse.
ORGANISM      Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
1 (bases 1 to 48)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,R., Hamill,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
M., Rose,M., Rose,R., Stokes,R., Tinney,A., von Niederhausern,A.
and Wright,D., Weiss,R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert R. Weiss
University of Utah Genome Center
Rm. 408, Biomedical Polymers Research Bldg., 20 S. 2040 E., Salt, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000   Std Error: 0.00
Plate: 0242   row: F   column: 08
Seq primer: CACACAGGAAAACAGTATGAT
Class: plasmid ends
High quality sequence stop: 48.
Location/Qualifiers
  1..48
  /organism "Mus musculus"
  /strain "c57BL/6J"
  /ab_xref "taxon:10090"
  /clone "00032M0242H0R"
  /clone_lib "Mouse 10kb plasmid 00032M Library"
  /sex "Female"
  /lab_host "E. coli strain XL10 Gold, 11 resistant, F'"
  /note "Vector: pMD29v; Purified genomic DNA from M.
musculus c57BL/6J (female) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and 14
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adapted DNA was purified and size-selected for a 9.5 to

```







GenCore version 5.1.4\_p5\_4578  
Copyright (c) 1993 - 2003 CompuGen Ltd.

CM nucleic - nucleic search, using sw model

Run on: March 18, 2003, 10:53:41 : Search time 809.508 Seconds  
(without alignments)  
400.142 Million cell updates/sec

Title: US-09-900-115-5

Perfect score: 20  
Sequence: 1 gcaacagttctctccgtaa 20

Scoring table: IDENTIFY\_NUC  
Gapop 10.0 , gapext 1.0

Searched: 16154066 seqs, 809774376 residues

Total number of hits satisfying chosen parameters: 102860

Minimum DB seq length: 0  
Maximum DB seq length: 50

Post-processing: Minimum Match 100%  
Maximum Match 100%  
Listing first 1000 summaries

Database :

- EST:\*
- 1: em\_estha:\*
  - 2: em\_esthum:\*
  - 3: em\_estin:\*
  - 4: em\_estnu:\*
  - 5: em\_estov:\*
  - 6: em\_estpl:\*
  - 7: em\_estro:\*
  - 8: em\_hic:\*
  - 9: qb\_est1:\*
  - 10: qb\_est2:\*
  - 11: qb\_hic:\*
  - 12: qb\_est3:\*
  - 13: qb\_est4:\*
  - 14: qb\_est5:\*
  - 15: em\_estfun:\*
  - 16: em\_estom:\*
  - 17: qb\_qss:\*
  - 18: em\_qss\_hum:\*
  - 19: em\_qss\_inv:\*
  - 20: em\_qss\_pln:\*
  - 21: em\_qss\_vit:\*
  - 22: em\_qss\_fun:\*
  - 23: em\_qss\_mam:\*
  - 24: em\_qss\_mus:\*
  - 25: em\_qss\_other:\*
  - 26: em\_qss\_pro:\*
  - 27: em\_qss\_rod:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query length | DB ID | Description |
|------------|-------|--------------|-------|-------------|
| c 1        | 14    | 70.0         | 46 13 | B1646968    |
| c 2        | 12.8  | 64.0         | 46 17 | BH856719    |
| c 3        | 12.8  | 64.0         | 50 9  | AL628983    |
| c 4        | 12.4  | 62.0         | 38 17 | TA37H02P    |
| c 5        | 12.4  | 62.0         | 43 9  | A1038493    |
| c 6        | 12.4  | 62.0         | 49 9  | AL776769    |

|           |           |    |    |           |      |      |    |   |
|-----------|-----------|----|----|-----------|------|------|----|---|
| AV957156  | AV957156  | 33 | 10 | AV957156  | 61.0 | 12.2 | 7  | c |
| AU102383  | AU102383  | 50 | 9  | AU102383  | 61.0 | 12.2 | 8  |   |
| AU106400  | AU106400  | 50 | 9  | AU106400  | 61.0 | 12.2 | 9  |   |
| AU106401  | AU106401  | 50 | 9  | AU106401  | 61.0 | 12.2 | 10 |   |
| AU106404  | AU106404  | 50 | 9  | AU106404  | 61.0 | 12.2 | 11 |   |
| AU106406  | AU106406  | 50 | 9  | AU106406  | 61.0 | 12.2 | 12 |   |
| AU106408  | AU106408  | 50 | 9  | AU106408  | 61.0 | 12.2 | 13 |   |
| AU106409  | AU106409  | 50 | 9  | AU106409  | 61.0 | 12.2 | 14 |   |
| AU106410  | AU106410  | 50 | 9  | AU106410  | 61.0 | 12.2 | 15 |   |
| AU106412  | AU106412  | 50 | 9  | AU106412  | 61.0 | 12.2 | 16 |   |
| AU106419  | AU106419  | 50 | 9  | AU106419  | 61.0 | 12.2 | 17 |   |
| AU106421  | AU106421  | 50 | 9  | AU106421  | 61.0 | 12.2 | 18 |   |
| AU106425  | AU106425  | 50 | 9  | AU106425  | 61.0 | 12.2 | 19 |   |
| AU106430  | AU106430  | 50 | 9  | AU106430  | 61.0 | 12.2 | 20 |   |
| AU106432  | AU106432  | 50 | 9  | AU106432  | 61.0 | 12.2 | 21 |   |
| AU106433  | AU106433  | 50 | 9  | AU106433  | 61.0 | 12.2 | 22 |   |
| AU106435  | AU106435  | 50 | 9  | AU106435  | 61.0 | 12.2 | 23 |   |
| AU106438  | AU106438  | 50 | 9  | AU106438  | 61.0 | 12.2 | 24 |   |
| AU106442  | AU106442  | 50 | 9  | AU106442  | 61.0 | 12.2 | 25 |   |
| AU106444  | AU106444  | 50 | 9  | AU106444  | 61.0 | 12.2 | 26 |   |
| AU106446  | AU106446  | 50 | 9  | AU106446  | 61.0 | 12.2 | 27 |   |
| AU106452  | AU106452  | 50 | 9  | AU106452  | 61.0 | 12.2 | 28 |   |
| AU106460  | AU106460  | 50 | 9  | AU106460  | 61.0 | 12.2 | 29 |   |
| AU106464  | AU106464  | 50 | 9  | AU106464  | 61.0 | 12.2 | 30 |   |
| AU106498  | AU106498  | 50 | 9  | AU106498  | 61.0 | 12.2 | 31 |   |
| AU106499  | AU106499  | 50 | 9  | AU106499  | 61.0 | 12.2 | 32 |   |
| AU106504  | AU106504  | 50 | 9  | AU106504  | 61.0 | 12.2 | 33 |   |
| AU106505  | AU106505  | 50 | 9  | AU106505  | 61.0 | 12.2 | 34 |   |
| AU106507  | AU106507  | 50 | 9  | AU106507  | 61.0 | 12.2 | 35 |   |
| AU106508  | AU106508  | 50 | 9  | AU106508  | 61.0 | 12.2 | 36 |   |
| AU106510  | AU106510  | 50 | 9  | AU106510  | 61.0 | 12.2 | 37 |   |
| AU106511  | AU106511  | 50 | 9  | AU106511  | 61.0 | 12.2 | 38 |   |
| AU106512  | AU106512  | 50 | 9  | AU106512  | 61.0 | 12.2 | 39 |   |
| AU106527  | AU106527  | 50 | 9  | AU106527  | 61.0 | 12.2 | 40 |   |
| AU106528  | AU106528  | 50 | 9  | AU106528  | 61.0 | 12.2 | 41 |   |
| AU106529  | AU106529  | 50 | 9  | AU106529  | 61.0 | 12.2 | 42 |   |
| AU106530  | AU106530  | 50 | 9  | AU106530  | 61.0 | 12.2 | 43 |   |
| AU106531  | AU106531  | 50 | 9  | AU106531  | 61.0 | 12.2 | 44 |   |
| AU106532  | AU106532  | 50 | 9  | AU106532  | 61.0 | 12.2 | 45 |   |
| AU106533  | AU106533  | 50 | 9  | AU106533  | 61.0 | 12.2 | 46 |   |
| AU106534  | AU106534  | 50 | 9  | AU106534  | 61.0 | 12.2 | 47 |   |
| AU106536  | AU106536  | 50 | 9  | AU106536  | 61.0 | 12.2 | 48 |   |
| AU106537  | AU106537  | 50 | 9  | AU106537  | 61.0 | 12.2 | 49 |   |
| AU106539  | AU106539  | 50 | 9  | AU106539  | 61.0 | 12.2 | 50 |   |
| AU106543  | AU106543  | 50 | 9  | AU106543  | 61.0 | 12.2 | 51 |   |
| AL779895  | AL779895  | 45 | 9  | AL779895  | 60.0 | 12   | 52 | c |
| AU106325  | AU106325  | 50 | 9  | AU106325  | 60.0 | 12   | 53 |   |
| AU106397  | AU106397  | 50 | 9  | AU106397  | 60.0 | 12   | 54 |   |
| AU106494  | AU106494  | 50 | 9  | AU106494  | 60.0 | 12   | 55 |   |
| AU007710  | AU007710  | 49 | 9  | AU007710  | 59.0 | 11.8 | 56 | c |
| AV968947  | AV968947  | 49 | 10 | AV968947  | 59.0 | 11.8 | 57 | c |
| H51330    | H51330    | 40 | 14 | H51330    | 58.0 | 11.6 | 58 |   |
| AA687683  | AA687683  | 44 | 9  | AA687683  | 58.0 | 11.6 | 59 |   |
| AZ576556  | AZ576556  | 49 | 17 | AZ576556  | 58.0 | 11.6 | 60 | c |
| BH792298  | BH792298  | 49 | 17 | BH792298  | 58.0 | 11.6 | 61 |   |
| AU102882  | AU102882  | 50 | 9  | AU102882  | 58.0 | 11.6 | 62 |   |
| TA196806Q | TA196806Q | 24 | 17 | TA196806Q | 57.0 | 11.4 | 63 | c |
| AZ467086  | AZ467086  | 45 | 17 | AZ467086  | 57.0 | 11.4 | 64 |   |
| DR30F13S  | DR30F13S  | 47 | 17 | DR30F13S  | 57.0 | 11.4 | 65 | c |
| BH814028  | BH814028  | 48 | 17 | BH814028  | 57.0 | 11.4 | 66 |   |
| AA124006  | AA124006  | 49 | 9  | AA124006  | 57.0 | 11.4 | 67 | c |
| AA868842  | AA868842  | 22 | 9  | AA868842  | 56.0 | 11.2 | 68 |   |
| TA5A06P   | TA5A06P   | 27 | 17 | TA5A06P   | 56.0 | 11.2 | 69 | c |
| BH854575  | BH854575  | 33 | 17 | BH854575  | 56.0 | 11.2 | 70 |   |
| AZ775498  | AZ775498  | 36 | 17 | AZ775498  | 56.0 | 11.2 | 71 |   |
| H86084    | H86084    | 37 | 14 | H86084    | 56.0 | 11.2 | 72 | c |
| TA384C05P | TA384C05P | 39 | 17 | TA384C05P | 56.0 | 11.2 | 73 | c |
| AZ457924  | AZ457924  | 40 | 17 | AZ457924  | 56.0 | 11.2 | 74 |   |
| BG505228  | BG505228  | 42 | 12 | BG505228  | 56.0 | 11.2 | 75 | c |
| BG505235  | BG505235  | 42 | 12 | BG505235  | 56.0 | 11.2 | 76 |   |
| TA137B11Q | TA137B11Q | 42 | 17 | TA137B11Q | 56.0 | 11.2 | 77 | c |
| AA410197  | AA410197  | 46 | 9  | AA410197  | 56.0 | 11.2 | 78 | c |
| H44578    | H44578    | 48 | 14 | H44578    | 56.0 | 11.2 | 79 | c |

|   |     |      |      |    |    |          |     |      |      |    |   |          |          |
|---|-----|------|------|----|----|----------|-----|------|------|----|---|----------|----------|
| c | 80  | 11.2 | 56.0 | 49 | 9  | A1018541 | 154 | 10.6 | 54.0 | 50 | 9 | A0106494 | A0106494 |
| c | 81  | 11.2 | 56.0 | 50 | 9  | A0106449 | 154 | 10.6 | 54.0 | 50 | 9 | A0106494 | A0106494 |
| c | 82  | 11.2 | 56.0 | 50 | 9  | A0106467 | 155 | 10.6 | 54.0 | 50 | 9 | A0106496 | A0106496 |
| c | 83  | 11.2 | 56.0 | 50 | 9  | A0107912 | 156 | 10.6 | 54.0 | 50 | 9 | A0106496 | A0106496 |
| c | 84  | 11   | 55.0 | 43 | 17 | A0049817 | 157 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 85  | 11   | 55.0 | 46 | 9  | A1682019 | 158 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 86  | 11   | 55.0 | 47 | 17 | A1771866 | 159 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 87  | 11   | 55.0 | 47 | 9  | A0956876 | 160 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 88  | 11   | 55.0 | 48 | 13 | B1561718 | 161 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 89  | 11   | 55.0 | 40 | 9  | A1159450 | 162 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 90  | 11   | 55.0 | 43 | 9  | A1683394 | 163 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 91  | 11   | 55.0 | 43 | 14 | W48487   | 164 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 92  | 11   | 55.0 | 45 | 14 | N94937   | 165 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 93  | 11   | 55.0 | 47 | 17 | A2503949 | 166 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 94  | 11   | 55.0 | 47 | 17 | A1771863 | 167 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 95  | 11   | 55.0 | 49 | 17 | B0627713 | 168 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 96  | 11   | 55.0 | 50 | 9  | A0102695 | 169 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 97  | 11   | 55.0 | 50 | 9  | A0104479 | 170 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 98  | 11   | 55.0 | 50 | 9  | A0104026 | 171 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 99  | 11   | 55.0 | 50 | 9  | A0104955 | 172 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 100 | 11   | 55.0 | 50 | 9  | A0104956 | 173 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 101 | 11   | 55.0 | 50 | 9  | A0104957 | 174 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 102 | 11   | 55.0 | 50 | 9  | A0104958 | 175 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 103 | 11   | 55.0 | 50 | 9  | A0104960 | 176 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 104 | 11   | 55.0 | 50 | 9  | A0104961 | 177 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 105 | 11   | 55.0 | 50 | 9  | A0104962 | 178 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 106 | 11   | 55.0 | 50 | 9  | A0104963 | 179 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 107 | 11   | 55.0 | 50 | 9  | A0108036 | 180 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 108 | 10.8 | 54.0 | 29 | 17 | A2309154 | 181 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 109 | 10.8 | 54.0 | 40 | 9  | A0254131 | 182 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 110 | 10.8 | 54.0 | 41 | 17 | A2475800 | 183 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 111 | 10.8 | 54.0 | 41 | 17 | B0011495 | 184 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 112 | 10.8 | 54.0 | 46 | 9  | A1463345 | 185 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 113 | 10.8 | 54.0 | 47 | 10 | A0959474 | 186 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 114 | 10.8 | 54.0 | 47 | 17 | B0005031 | 187 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 115 | 10.8 | 54.0 | 49 | 9  | A1485645 | 188 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 116 | 10.8 | 54.0 | 50 | 9  | A1057597 | 189 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 117 | 10.8 | 54.0 | 50 | 9  | A0104130 | 190 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 118 | 10.8 | 54.0 | 50 | 9  | A0105744 | 191 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 119 | 10.8 | 54.0 | 50 | 9  | A0107208 | 192 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 120 | 10.8 | 54.0 | 50 | 9  | A0107215 | 193 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 121 | 10.8 | 54.0 | 50 | 17 | A2768403 | 194 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 122 | 10.6 | 54.0 | 31 | 9  | A1142775 | 195 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 123 | 10.6 | 54.0 | 41 | 9  | A1466379 | 196 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 124 | 10.6 | 54.0 | 43 | 14 | A48676   | 197 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 125 | 10.6 | 54.0 | 43 | 17 | A2610724 | 198 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 126 | 10.6 | 54.0 | 43 | 17 | A2877631 | 199 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 127 | 10.6 | 54.0 | 42 | 17 | B0095696 | 200 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 128 | 10.6 | 54.0 | 43 | 9  | A1610885 | 201 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 129 | 10.6 | 54.0 | 43 | 17 | A2437743 | 202 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 130 | 10.6 | 54.0 | 44 | 13 | B1050185 | 203 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 131 | 10.6 | 54.0 | 45 | 12 | B6281247 | 204 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 132 | 10.6 | 54.0 | 46 | 9  | A1124140 | 205 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 133 | 10.6 | 54.0 | 46 | 9  | A1581136 | 206 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 134 | 10.6 | 54.0 | 46 | 10 | A0961488 | 207 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 135 | 10.6 | 54.0 | 47 | 9  | A1465485 | 208 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 136 | 10.6 | 54.0 | 47 | 17 | B0051959 | 209 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 137 | 10.6 | 54.0 | 48 | 13 | B1094824 | 210 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 138 | 10.6 | 54.0 | 48 | 17 | A2863545 | 211 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 139 | 10.6 | 54.0 | 49 | 9  | A1641229 | 212 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 140 | 10.6 | 54.0 | 49 | 9  | A0243864 | 213 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 141 | 10.6 | 54.0 | 49 | 12 | B6389637 | 214 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 142 | 10.6 | 54.0 | 50 | 9  | A0103437 | 215 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 143 | 10.6 | 54.0 | 50 | 9  | A0104792 | 216 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 144 | 10.6 | 54.0 | 50 | 9  | A0104795 | 217 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 145 | 10.6 | 54.0 | 50 | 9  | A0105853 | 218 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 146 | 10.6 | 54.0 | 50 | 9  | A0106411 | 219 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 147 | 10.6 | 54.0 | 50 | 9  | A0106414 | 220 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 148 | 10.6 | 54.0 | 50 | 9  | A0106416 | 221 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 149 | 10.6 | 54.0 | 50 | 9  | A0106418 | 222 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 150 | 10.6 | 54.0 | 50 | 9  | A0106421 | 223 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 151 | 10.6 | 54.0 | 50 | 9  | A0106423 | 224 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |
| c | 152 | 10.6 | 54.0 | 50 | 9  | A0106424 | 225 | 10.6 | 54.0 | 50 | 9 | A0106498 | A0106498 |

|       |      |      |    |    |           |            |       |     |      |    |    |           |           |            |
|-------|------|------|----|----|-----------|------------|-------|-----|------|----|----|-----------|-----------|------------|
| c 226 | 10.6 | 54.0 | 50 | 9  | AU107443  | AU107443   | 299   | 10  | 50.0 | 27 | 17 | BH848156  | BH848156  | SAIK_0675  |
| c 227 | 10.6 | 54.0 | 50 | 14 | H55458    | CH8220397  | c 400 | 10  | 50.0 | 28 | 17 | BH792257  | BH792257  | SAIK_0641  |
| c 228 | 10.4 | 52.0 | 25 | 9  | A1643068  | mo96a04.x  | c 401 | 10  | 50.0 | 28 | 17 | TA250805P | TA250805P | T. Bruce1  |
| c 229 | 10.4 | 52.0 | 27 | 17 | AZ433891  | AZ433891   | 302   | 10  | 50.0 | 30 | 17 | AZ486857  | AZ486857  | 1M0415024  |
| c 230 | 10.4 | 52.0 | 31 | 17 | AZ798762  | 2M0055C18  | c 303 | 10  | 50.0 | 41 | 9  | A1342893  | A1342893  | qo42504.x  |
| c 231 | 10.4 | 52.0 | 34 | 9  | AU256102  | AU256102   | c 304 | 10  | 50.0 | 43 | 17 | AZ486766  | AZ486766  | 1M0415H10  |
| c 232 | 10.4 | 52.0 | 36 | 12 | BH782308  | 602106095  | c 305 | 10  | 50.0 | 44 | 9  | A1958203  | A1958203  | 1c42511.y  |
| c 233 | 10.4 | 52.0 | 37 | 9  | A1610223  | tp15904.x  | c 306 | 10  | 50.0 | 36 | 10 | AV832536  | AV832536  | AV842546   |
| c 234 | 10.4 | 52.0 | 40 | 9  | AA641270  | nr78a04.s  | c 307 | 10  | 50.0 | 36 | 17 | AZ425719  | AZ425719  | 1M0205N21  |
| c 235 | 10.4 | 52.0 | 40 | 13 | BJ034027  | BJ034027   | c 308 | 10  | 50.0 | 36 | 17 | AL762128  | AL762128  | Arabi10ps  |
| c 236 | 10.4 | 52.0 | 40 | 17 | BH633074  | BH633074   | c 309 | 10  | 50.0 | 37 | 9  | AA991223  | AA991223  | 0840001.s  |
| c 237 | 10.4 | 52.0 | 44 | 9  | A1798406  | A1798406   | c 310 | 10  | 50.0 | 38 | 9  | AA493357  | AA493357  | 0648005.s  |
| c 238 | 10.4 | 52.0 | 46 | 17 | AZ511280  | 1M0356E1.x | c 311 | 10  | 50.0 | 38 | 9  | AA209035  | AA209035  | mw74012.r  |
| c 239 | 10.4 | 52.0 | 46 | 17 | AZ589035  | 1M0397D14  | c 312 | 10  | 50.0 | 38 | 12 | BF101627  | BF101627  | 1M0175454H |
| c 240 | 10.4 | 52.0 | 47 | 17 | AZ482906  | 1M0308A18  | c 313 | 10  | 50.0 | 38 | 14 | R37418    | R37418    | y156b07.s1 |
| c 241 | 10.4 | 52.0 | 47 | 17 | BH813761  | BH813761   | c 314 | 10  | 50.0 | 39 | 10 | AV949425  | AV949425  | AV949425   |
| c 242 | 10.4 | 52.0 | 48 | 9  | AL784578  | AL784578   | c 315 | 10  | 50.0 | 41 | 17 | AZ797364  | AZ797364  | 2M0055A21  |
| c 243 | 10.4 | 52.0 | 49 | 12 | BF203474  | BF203474   | c 316 | 10  | 50.0 | 42 | 10 | AV833088  | AV833088  | AV833088   |
| c 244 | 10.4 | 52.0 | 49 | 17 | AZ790187  | AZ790187   | c 317 | 10  | 50.0 | 42 | 10 | AV949395  | AV949395  | AV949395   |
| c 245 | 10.4 | 52.0 | 49 | 17 | TA170E02P | TA170E02P  | c 318 | 10  | 50.0 | 42 | 10 | AW063157  | AW063157  | 1M0408.KK  |
| c 246 | 10.4 | 52.0 | 50 | 9  | AU102915  | AU102915   | c 319 | 10  | 50.0 | 44 | 14 | D18695    | D18695    | M05S01757  |
| c 247 | 10.4 | 52.0 | 50 | 9  | AU104942  | AU104942   | c 320 | 10  | 50.0 | 44 | 17 | AQ096085  | AQ096085  | HS_40401.A |
| c 248 | 10.4 | 52.0 | 50 | 9  | AU105456  | AU105456   | c 321 | 10  | 50.0 | 44 | 17 | AZ661883  | AZ661883  | 1M0408K11  |
| c 249 | 10.4 | 52.0 | 50 | 9  | AU106309  | AU106309   | c 322 | 10  | 50.0 | 44 | 17 | AZ806103  | AZ806103  | 2M0067N19  |
| c 250 | 10.4 | 52.0 | 50 | 9  | AU107246  | AU107246   | c 323 | 10  | 50.0 | 45 | 10 | BE393504  | BE393504  | 6014110941 |
| c 251 | 10.4 | 52.0 | 50 | 9  | AU107430  | AU107430   | c 324 | 10  | 50.0 | 45 | 13 | BJ060444  | BJ060444  | 1M0000444  |
| c 252 | 10.4 | 52.0 | 50 | 9  | AU107431  | AU107431   | c 325 | 10  | 50.0 | 45 | 17 | BH810415  | BH810415  | SAIK_0475  |
| c 253 | 10.4 | 52.0 | 50 | 9  | AU107677  | AU107677   | c 326 | 10  | 50.0 | 45 | 17 | CNS0711K  | CNS0711K  | Arabi10ps  |
| c 254 | 10.4 | 52.0 | 50 | 14 | BJ035910  | BJ035910   | c 327 | 10  | 50.0 | 46 | 9  | A1357720  | A1357720  | qy73404.x  |
| c 255 | 10.4 | 52.0 | 50 | 17 | DR24E15S  | DR24E15S   | c 328 | 10  | 50.0 | 46 | 9  | AA428129  | AA428129  | 2W50306.s  |
| c 256 | 10.2 | 51.0 | 14 | 17 | AZ643528  | AZ643528   | c 329 | 10  | 50.0 | 46 | 9  | AA518962  | AA518962  | V105007.r  |
| c 257 | 10.2 | 51.0 | 25 | 9  | A1788947  | A1788947   | c 330 | 10  | 50.0 | 46 | 10 | BE257952  | BE257952  | 601109788  |
| c 258 | 10.2 | 51.0 | 25 | 9  | AL744368  | AL744368   | c 331 | 10  | 50.0 | 46 | 17 | AZ373810  | AZ373810  | 1M0126E17  |
| c 259 | 10.2 | 51.0 | 26 | 17 | BH863120  | BH863120   | c 332 | 10  | 50.0 | 47 | 17 | BH865082  | BH865082  | SAIK_0647  |
| c 260 | 10.2 | 51.0 | 28 | 17 | TA188D07P | TA188D07P  | c 333 | 10  | 50.0 | 48 | 17 | CNS0703G  | CNS0703G  | Arabi10ps  |
| c 261 | 10.2 | 51.0 | 34 | 9  | A1020003  | na95h03.r  | c 334 | 10  | 50.0 | 49 | 9  | AA025722  | AA025722  | z686111.s  |
| c 262 | 10.2 | 51.0 | 34 | 17 | AZ773199  | AZ773199   | c 335 | 10  | 50.0 | 49 | 9  | AA645079  | AA645079  | my53413.r  |
| c 263 | 10.2 | 51.0 | 37 | 13 | BJ049360  | BJ049360   | c 336 | 10  | 50.0 | 49 | 10 | AW396264  | AW396264  | sh236305.y |
| c 264 | 10.2 | 51.0 | 38 | 17 | AZ442523  | AZ442523   | c 337 | 10  | 50.0 | 49 | 12 | BG341711  | BG341711  | 6023454.r  |
| c 265 | 10.2 | 51.0 | 40 | 9  | AA973004  | AA973004   | c 338 | 10  | 50.0 | 49 | 12 | BE736219  | BE736219  | 601407155  |
| c 266 | 10.2 | 51.0 | 40 | 9  | AA975071  | AA975071   | c 339 | 10  | 50.0 | 49 | 14 | C02410    | C02410    | HUMS00122H |
| c 267 | 10.2 | 51.0 | 40 | 17 | AL756512  | AL756512   | c 340 | 10  | 50.0 | 49 | 17 | AZ604991  | AZ604991  | 1M0426A11  |
| c 268 | 10.2 | 51.0 | 41 | 17 | AL798923  | AL798923   | c 341 | 10  | 50.0 | 50 | 9  | BH792298  | BH792298  | SAIK_0644  |
| c 269 | 10.2 | 51.0 | 41 | 12 | BG426222  | BG426222   | c 342 | 10  | 50.0 | 50 | 9  | AA108275  | AA108275  | EST0018.r  |
| c 270 | 10.2 | 51.0 | 43 | 17 | AZ310534  | AZ310534   | c 343 | 10  | 50.0 | 50 | 9  | AU102629  | AU102629  | AU102629   |
| c 271 | 10.2 | 51.0 | 46 | 9  | AA052407  | AA052407   | c 344 | 10  | 50.0 | 50 | 9  | AU104195  | AU104195  | AU104195   |
| c 272 | 10.2 | 51.0 | 46 | 9  | AA828238  | AA828238   | c 345 | 10  | 50.0 | 50 | 9  | AU103670  | AU103670  | AU103670   |
| c 273 | 10.2 | 51.0 | 46 | 17 | AZ372437  | AZ372437   | c 346 | 10  | 50.0 | 50 | 9  | AU104373  | AU104373  | AU104373   |
| c 274 | 10.2 | 51.0 | 46 | 17 | AL754879  | AL754879   | c 347 | 10  | 50.0 | 50 | 9  | AU105565  | AU105565  | AU105565   |
| c 275 | 10.2 | 51.0 | 47 | 17 | AL765439  | AL765439   | c 348 | 10  | 50.0 | 50 | 9  | AU105597  | AU105597  | AU105597   |
| c 276 | 10.2 | 51.0 | 47 | 17 | AL764714  | AL764714   | c 349 | 10  | 50.0 | 50 | 9  | AU105602  | AU105602  | AU105602   |
| c 277 | 10.2 | 51.0 | 49 | 9  | AA936278  | AA936278   | c 350 | 10  | 50.0 | 50 | 9  | AU105606  | AU105606  | AU105606   |
| c 278 | 10.2 | 51.0 | 49 | 9  | A1558595  | 1b68a10.y  | c 351 | 10  | 50.0 | 50 | 9  | AU106774  | AU106774  | AU106774   |
| c 279 | 10.2 | 51.0 | 49 | 17 | AL765211  | AL765211   | c 352 | 10  | 50.0 | 50 | 9  | AU107152  | AU107152  | AU107152   |
| c 280 | 10.2 | 51.0 | 50 | 9  | AU102743  | AU102743   | c 353 | 10  | 50.0 | 50 | 9  | AU107153  | AU107153  | AU107153   |
| c 281 | 10.2 | 51.0 | 50 | 9  | AU103482  | AU103482   | c 354 | 9.8 | 49.0 | 23 | 14 | D19998    | D19998    | HUMS0009.H |
| c 282 | 10.2 | 51.0 | 50 | 9  | AU103484  | AU103484   | c 355 | 9.8 | 49.0 | 25 | 14 | W36628    | W36628    | mb67e03.r1 |
| c 283 | 10.2 | 51.0 | 50 | 9  | AU105443  | AU105443   | c 356 | 9.8 | 49.0 | 27 | 17 | BH792346  | BH792346  | SAIK_0644  |
| c 284 | 10.2 | 51.0 | 50 | 9  | AU105742  | AU105742   | c 357 | 9.8 | 49.0 | 30 | 17 | AZ423436  | AZ423436  | 1M0202101  |
| c 285 | 10.2 | 51.0 | 50 | 9  | AU106308  | AU106308   | c 358 | 9.8 | 49.0 | 33 | 13 | BJ052224  | BJ052224  | BJ052224   |
| c 286 | 10.2 | 51.0 | 50 | 9  | AU106313  | AU106313   | c 359 | 9.8 | 49.0 | 35 | 17 | AZ838499  | AZ838499  | 2M0134P10  |
| c 287 | 10.2 | 51.0 | 50 | 9  | AU106317  | AU106317   | c 360 | 9.8 | 49.0 | 36 | 10 | AV832903  | AV832903  | AV832903   |
| c 288 | 10.2 | 51.0 | 50 | 9  | AU106319  | AU106319   | c 361 | 9.8 | 49.0 | 38 | 17 | BH865875  | BH865875  | SAIK_10000 |
| c 289 | 10.2 | 51.0 | 50 | 9  | AU106322  | AU106322   | c 362 | 9.8 | 49.0 | 38 | 17 | BH865882  | BH865882  | SAIK_10000 |
| c 290 | 10.2 | 51.0 | 50 | 9  | AU106325  | AU106325   | c 363 | 9.8 | 49.0 | 38 | 17 | AL767019  | AL767019  | Arabi10ps  |
| c 291 | 10.2 | 51.0 | 50 | 9  | AU106403  | AU106403   | c 364 | 9.8 | 49.0 | 49 | 10 | BE353115  | BE353115  | 601241241  |
| c 292 | 10.2 | 51.0 | 50 | 9  | AU106541  | AU106541   | c 365 | 9.8 | 49.0 | 49 | 14 | BH4012    | BH4012    | yy88a10.r1 |
| c 293 | 10.2 | 51.0 | 50 | 9  | AU106608  | AU106608   | c 366 | 9.8 | 49.0 | 39 | 17 | AZ627175  | AZ627175  | 1M047012   |
| c 294 | 10.2 | 51.0 | 50 | 9  | AU106939  | AU106939   | c 367 | 9.8 | 49.0 | 39 | 17 | BH811645  | BH811645  | SAIK_0595  |
| c 295 | 10.2 | 51.0 | 50 | 9  | AU107888  | AU107888   | c 368 | 9.8 | 49.0 | 40 | 9  | A1151322  | A1151322  | pc74e11.x  |
| c 296 | 10.2 | 51.0 | 50 | 9  | AU107889  | AU107889   | c 369 | 9.8 | 49.0 | 40 | 9  | A1267457  | A1267457  | aq65a07.x  |
| c 297 | 10.2 | 51.0 | 50 | 17 | AZ949606  | 2M0213104  | c 370 | 9.8 | 49.0 | 40 | 9  | A1306379  | A1306379  | jp125005.x |
| c 298 | 10.2 | 51.0 | 21 | 17 | AZ583481  | 1M0378K06  | c 371 | 9.8 | 49.0 | 40 | 9  | A1306379  | A1306379  | jp125005.x |

|     |     |      |    |    |          |             |     |     |      |    |    |           |
|-----|-----|------|----|----|----------|-------------|-----|-----|------|----|----|-----------|
| 472 | 9.8 | 49.0 | 40 | 14 | WR7969   | mt65a02.r1  | 445 | 9.6 | 48.0 | 44 | 13 | KJ080492  |
| 473 | 9.8 | 49.0 | 41 | 17 | AZ787161 | 2M0043M03   | 446 | 9.6 | 48.0 | 44 | 17 | AZ410142  |
| 474 | 9.8 | 49.0 | 42 | 17 | BH811305 | SALK 0582   | 447 | 9.6 | 48.0 | 44 | 17 | AZ824131  |
| 475 | 9.8 | 49.0 | 43 | 9  | A1944364 | 1c7w007.y   | 448 | 9.6 | 48.0 | 45 | 9  | AA811409  |
| 476 | 9.8 | 49.0 | 44 | 9  | AA424162 | 3c6a01.f    | 449 | 9.6 | 48.0 | 46 | 9  | AA049722  |
| 477 | 9.8 | 49.0 | 43 | 13 | KJ001434 | BJ001434    | 450 | 9.6 | 48.0 | 46 | 9  | AA748566  |
| 478 | 9.8 | 49.0 | 43 | 17 | AZ597699 | 1M041162.3  | 451 | 9.6 | 48.0 | 46 | 9  | AA905046  |
| 479 | 9.8 | 49.0 | 43 | 17 | BH648192 | 10080020H0  | 452 | 9.6 | 48.0 | 46 | 9  | A1864649  |
| 480 | 9.8 | 49.0 | 44 | 17 | AZ025641 | 1c20564.1   | 453 | 9.6 | 48.0 | 46 | 17 | AZ664677  |
| 481 | 9.8 | 49.0 | 44 | 17 | BH848112 | SALK 0675   | 454 | 9.6 | 48.0 | 46 | 17 | AZ769885  |
| 482 | 9.8 | 49.0 | 45 | 14 | D43088   | D43088      | 455 | 9.6 | 48.0 | 47 | 17 | AZ410055  |
| 483 | 9.8 | 49.0 | 46 | 9  | A1096608 | SW9VL3CAN   | 456 | 9.6 | 48.0 | 47 | 17 | BH855430  |
| 484 | 9.8 | 49.0 | 46 | 9  | A1153463 | uc5a11.1    | 457 | 9.6 | 48.0 | 48 | 17 | BH626486  |
| 485 | 9.8 | 49.0 | 46 | 9  | A1355818 | qu02a02.x   | 458 | 9.6 | 48.0 | 49 | 9  | AA790133  |
| 486 | 9.8 | 49.0 | 47 | 14 | 197439   | Yc57407.r1  | 459 | 9.6 | 48.0 | 49 | 9  | AA694674  |
| 487 | 9.8 | 49.0 | 47 | 17 | AZ412766 | 1M0028K12   | 460 | 9.6 | 48.0 | 49 | 9  | A1284474  |
| 488 | 9.8 | 49.0 | 47 | 17 | AZ441255 | 1M007404    | 461 | 9.6 | 48.0 | 49 | 9  | A1416542  |
| 489 | 9.8 | 49.0 | 48 | 12 | 36545429 | 60250701.3  | 462 | 9.6 | 48.0 | 49 | 9  | AZ480723  |
| 490 | 9.8 | 49.0 | 48 | 14 | R03899   | PK12H10.r1  | 463 | 9.6 | 48.0 | 49 | 14 | N41715    |
| 491 | 9.8 | 49.0 | 50 | 9  | A0102271 | A0102271    | 464 | 9.6 | 48.0 | 50 | 9  | AA611122  |
| 492 | 9.8 | 49.0 | 50 | 9  | A0102959 | A0102959    | 465 | 9.6 | 48.0 | 50 | 9  | A0009984  |
| 493 | 9.8 | 49.0 | 50 | 9  | A0103916 | A0103916    | 466 | 9.6 | 48.0 | 50 | 9  | A0102475  |
| 494 | 9.8 | 49.0 | 50 | 9  | A0104917 | A0104917    | 467 | 9.6 | 48.0 | 50 | 9  | A0102687  |
| 495 | 9.8 | 49.0 | 50 | 9  | A0105852 | A0105852    | 468 | 9.6 | 48.0 | 50 | 9  | A0102688  |
| 496 | 9.8 | 49.0 | 50 | 9  | A0107601 | A0107601    | 469 | 9.6 | 48.0 | 50 | 9  | A0102689  |
| 497 | 9.8 | 49.0 | 50 | 9  | A0107602 | A0107602    | 470 | 9.6 | 48.0 | 50 | 9  | A0102690  |
| 498 | 9.8 | 49.0 | 50 | 9  | A0107670 | A0107670    | 471 | 9.6 | 48.0 | 50 | 9  | A0102692  |
| 499 | 9.8 | 49.0 | 50 | 9  | A0107672 | A0107672    | 472 | 9.6 | 48.0 | 50 | 9  | A0102696  |
| 500 | 9.8 | 49.0 | 50 | 9  | A0107675 | A0107675    | 473 | 9.6 | 48.0 | 50 | 9  | A0102697  |
| 501 | 9.8 | 49.0 | 50 | 9  | A0107678 | A0107678    | 474 | 9.6 | 48.0 | 50 | 9  | A0102698  |
| 502 | 9.8 | 49.0 | 50 | 9  | A0107679 | A0107679    | 475 | 9.6 | 48.0 | 50 | 9  | A0102700  |
| 503 | 9.8 | 49.0 | 50 | 9  | A0107680 | A0107680    | 476 | 9.6 | 48.0 | 50 | 9  | A0102994  |
| 504 | 9.8 | 49.0 | 50 | 9  | A0107681 | A0107681    | 477 | 9.6 | 48.0 | 50 | 9  | A0104461  |
| 505 | 9.8 | 49.0 | 50 | 9  | A0107686 | A0107686    | 478 | 9.6 | 48.0 | 50 | 9  | A0104809  |
| 506 | 9.8 | 49.0 | 50 | 9  | A0107688 | A0107688    | 479 | 9.6 | 48.0 | 50 | 9  | A0104810  |
| 507 | 9.8 | 49.0 | 50 | 9  | AA269906 | va60h12.r1  | 480 | 9.6 | 48.0 | 50 | 9  | A0104811  |
| 508 | 9.8 | 49.0 | 50 | 13 | B1175073 | OSTR007D9   | 481 | 9.6 | 48.0 | 50 | 9  | A0104904  |
| 509 | 9.8 | 49.0 | 50 | 14 | H55458   | CHR220497.c | 482 | 9.6 | 48.0 | 50 | 9  | A0106426  |
| 510 | 9.6 | 48.0 | 23 | 17 | AZ481511 | 1M04041.14  | 483 | 9.6 | 48.0 | 50 | 9  | A0106447  |
| 511 | 9.6 | 48.0 | 25 | 9  | A1620546 | t095b04.x   | 484 | 9.6 | 48.0 | 50 | 9  | A0106453  |
| 512 | 9.6 | 48.0 | 27 | 17 | AZ800595 | 2M0069H1.4  | 485 | 9.6 | 48.0 | 50 | 9  | A0106490  |
| 513 | 9.6 | 48.0 | 31 | 9  | AA999814 | 0842b02.s   | 486 | 9.6 | 48.0 | 50 | 9  | A0107022  |
| 514 | 9.6 | 48.0 | 32 | 9  | A0260268 | A0260268    | 487 | 9.6 | 48.0 | 50 | 9  | A0107255  |
| 515 | 9.6 | 48.0 | 33 | 17 | AZ653870 | 1M0527016   | 488 | 9.6 | 48.0 | 50 | 13 | B425819   |
| 516 | 9.6 | 48.0 | 33 | 17 | BH853380 | SALK 0769   | 489 | 9.6 | 48.0 | 50 | 17 | AZ351333  |
| 517 | 9.6 | 48.0 | 34 | 9  | AA916088 | 0841c04.s   | 490 | 9.6 | 48.0 | 50 | 17 | BH813383  |
| 518 | 9.6 | 48.0 | 34 | 14 | B1604357 | 603247225   | 491 | 9.6 | 48.0 | 50 | 17 | TA179028  |
| 519 | 9.6 | 48.0 | 34 | 14 | W85464   | mt48102.r1  | 492 | 9.6 | 47.0 | 20 | 17 | AZ951314  |
| 520 | 9.6 | 48.0 | 35 | 10 | AA969962 | AZ969962    | 493 | 9.6 | 47.0 | 22 | 9  | A1344786  |
| 521 | 9.6 | 48.0 | 36 | 17 | AZ791419 | 2M004101.4  | 494 | 9.6 | 47.0 | 24 | 17 | AZ409470  |
| 522 | 9.6 | 48.0 | 37 | 9  | AA908535 | 0841b12.s   | 495 | 9.6 | 47.0 | 25 | 17 | AZ784421  |
| 523 | 9.6 | 48.0 | 37 | 9  | AA178805 | ms15a05.r   | 496 | 9.6 | 47.0 | 26 | 17 | TA1108120 |
| 524 | 9.6 | 48.0 | 37 | 17 | AZ645667 | 1M0511c16   | 497 | 9.6 | 47.0 | 27 | 17 | AZ439160  |
| 525 | 9.6 | 48.0 | 38 | 13 | B1820611 | 60404855    | 498 | 9.6 | 47.0 | 28 | 17 | AZ629884  |
| 526 | 9.6 | 48.0 | 38 | 13 | KJ077998 | BJ077998    | 499 | 9.6 | 47.0 | 29 | 17 | BH864113  |
| 527 | 9.6 | 48.0 | 38 | 17 | AZ766530 | 1M0564K08   | 500 | 9.6 | 47.0 | 30 | 17 | AZ478227  |
| 528 | 9.6 | 48.0 | 38 | 17 | AZ815373 | 2M0083M06   | 501 | 9.6 | 47.0 | 30 | 17 | AZ603489  |
| 529 | 9.6 | 48.0 | 39 | 10 | AA846220 | AA846220    | 502 | 9.6 | 47.0 | 31 | 9  | AA689130  |
| 530 | 9.6 | 48.0 | 39 | 17 | AZ786602 | 2M0032M09   | 503 | 9.6 | 47.0 | 31 | 9  | AA922818  |
| 531 | 9.6 | 48.0 | 39 | 17 | AZ851262 | 2M0154121   | 504 | 9.6 | 47.0 | 31 | 9  | A1689315  |
| 532 | 9.6 | 48.0 | 40 | 9  | AA953179 | 0474b10.s   | 505 | 9.6 | 47.0 | 31 | 14 | B1768049  |
| 533 | 9.6 | 48.0 | 40 | 9  | A1444400 | 1E6Qa05.x   | 506 | 9.6 | 47.0 | 31 | 13 | BH895230  |
| 534 | 9.6 | 48.0 | 40 | 9  | A1972180 | wt6610.x    | 507 | 9.6 | 47.0 | 32 | 17 | AZ824048  |
| 535 | 9.6 | 48.0 | 40 | 14 | N93757   | 2b64b06.s1  | 508 | 9.6 | 47.0 | 33 | 14 | 044219    |
| 536 | 9.6 | 48.0 | 40 | 17 | AA599992 | 1M0416c08   | 509 | 9.6 | 47.0 | 33 | 17 | AZ785738  |
| 537 | 9.6 | 48.0 | 41 | 9  | AA676358 | 2i22b11.s   | 510 | 9.6 | 47.0 | 33 | 17 | BH866244  |
| 538 | 9.6 | 48.0 | 41 | 17 | AZ798444 | 2M0055c15   | 511 | 9.6 | 47.0 | 34 | 9  | AA572386  |
| 539 | 9.6 | 48.0 | 42 | 9  | A1634179 | AL634179    | 512 | 9.6 | 47.0 | 34 | 17 | AA074737  |
| 540 | 9.6 | 48.0 | 42 | 10 | AA848404 | AA848404    | 513 | 9.6 | 47.0 | 34 | 17 | AZ628598  |
| 541 | 9.6 | 48.0 | 43 | 9  | A1140282 | 3c21d05.x   | 514 | 9.6 | 47.0 | 34 | 17 | BH852437  |
| 542 | 9.6 | 48.0 | 43 | 9  | AA514470 | 0600c09.s   | 515 | 9.6 | 47.0 | 35 | 9  | A1679668  |
| 543 | 9.6 | 48.0 | 43 | 13 | BK001161 | 06001161    | 516 | 9.6 | 47.0 | 35 | 9  | AL785318  |
| 544 | 9.6 | 48.0 | 43 | 17 | BH862454 | SALK 0899   | 517 | 9.6 | 47.0 | 35 | 9  | AL802117  |

|     |     |      |     |       |     |      |    |    |           |                    |
|-----|-----|------|-----|-------|-----|------|----|----|-----------|--------------------|
| 518 | 9.4 | 47.0 | 9.4 | 518   | 9.4 | 47.0 | 48 | 9  | AA526765  | n156b11.s          |
| 519 | 9.4 | 47.0 | 9.4 | c 592 | 9.4 | 47.0 | 48 | 10 | AV834340  | AV834340           |
| 520 | 9.4 | 47.0 | 9.4 | c 593 | 9.4 | 47.0 | 48 | 17 | AZ786204  | 2M0621N04          |
| 521 | 9.4 | 47.0 | 9.4 | 594   | 9.4 | 47.0 | 49 | 9  | AA739463  | vv54a11.r          |
| 522 | 9.4 | 47.0 | 9.4 | c 595 | 9.4 | 47.0 | 49 | 9  | AI159805  | qr7c05.x           |
| 523 | 9.4 | 47.0 | 9.4 | 596   | 9.4 | 47.0 | 49 | 9  | AA108149  | m158j07.1          |
| 524 | 9.4 | 47.0 | 9.4 | c 597 | 9.4 | 47.0 | 49 | 9  | AI558595  | 1B68A10.y          |
| 525 | 9.4 | 47.0 | 9.4 | c 598 | 9.4 | 47.0 | 49 | 9  | AI779174  | AI779174           |
| 526 | 9.4 | 47.0 | 9.4 | c 599 | 9.4 | 47.0 | 49 | 9  | AA248379  | m878c09.r          |
| 527 | 9.4 | 47.0 | 9.4 | 600   | 9.4 | 47.0 | 49 | 10 | BE578991  | rK06c10.y          |
| 528 | 9.4 | 47.0 | 9.4 | 601   | 9.4 | 47.0 | 49 | 14 | H23825    | yn74e03.s1         |
| 529 | 9.4 | 47.0 | 9.4 | 602   | 9.4 | 47.0 | 49 | 17 | A2427327  | IM0209p11          |
| 530 | 9.4 | 47.0 | 9.4 | c 603 | 9.4 | 47.0 | 49 | 17 | BH800310  | 100812480          |
| 531 | 9.4 | 47.0 | 9.4 | c 604 | 9.4 | 47.0 | 49 | 17 | CNS07FDB2 | AL608345 Anopheles |
| 532 | 9.4 | 47.0 | 9.4 | c 605 | 9.4 | 47.0 | 49 | 17 | TA264C10P | AL484002 T. brucei |
| 533 | 9.4 | 47.0 | 9.4 | c 606 | 9.4 | 47.0 | 50 | 9  | AL681402  | AL681402           |
| 534 | 9.4 | 47.0 | 9.4 | c 607 | 9.4 | 47.0 | 50 | 9  | AL787711  | AL787711           |
| 535 | 9.4 | 47.0 | 9.4 | c 608 | 9.4 | 47.0 | 50 | 9  | AL790657  | AL790657           |
| 536 | 9.4 | 47.0 | 9.4 | c 609 | 9.4 | 47.0 | 50 | 9  | AL795164  | AL795164           |
| 537 | 9.4 | 47.0 | 9.4 | c 610 | 9.4 | 47.0 | 50 | 9  | AL795735  | AL795735           |
| 538 | 9.4 | 47.0 | 9.4 | c 611 | 9.4 | 47.0 | 50 | 9  | AL799119  | AL799119           |
| 539 | 9.4 | 47.0 | 9.4 | c 612 | 9.4 | 47.0 | 50 | 9  | AL800319  | AL800319           |
| 540 | 9.4 | 47.0 | 9.4 | 613   | 9.4 | 47.0 | 50 | 9  | AI0102649 | AI0102649          |
| 541 | 9.4 | 47.0 | 9.4 | 614   | 9.4 | 47.0 | 50 | 9  | AI0103009 | AI0103009          |
| 542 | 9.4 | 47.0 | 9.4 | c 615 | 9.4 | 47.0 | 50 | 9  | AI0103023 | AI0103023          |
| 543 | 9.4 | 47.0 | 9.4 | c 616 | 9.4 | 47.0 | 50 | 9  | AI0103024 | AI0103024          |
| 544 | 9.4 | 47.0 | 9.4 | c 617 | 9.4 | 47.0 | 50 | 9  | AI0103026 | AI0103026          |
| 545 | 9.4 | 47.0 | 9.4 | c 618 | 9.4 | 47.0 | 50 | 9  | AI0104025 | AI0104025          |
| 546 | 9.4 | 47.0 | 9.4 | c 619 | 9.4 | 47.0 | 50 | 9  | AI0104070 | AI0104070          |
| 547 | 9.4 | 47.0 | 9.4 | c 620 | 9.4 | 47.0 | 50 | 9  | AI0104071 | AI0104071          |
| 548 | 9.4 | 47.0 | 9.4 | 621   | 9.4 | 47.0 | 50 | 9  | AI0104325 | AI0104325          |
| 549 | 9.4 | 47.0 | 9.4 | c 622 | 9.4 | 47.0 | 50 | 9  | AI0104326 | AI0104326          |
| 550 | 9.4 | 47.0 | 9.4 | 623   | 9.4 | 47.0 | 50 | 9  | AI0104327 | AI0104327          |
| 551 | 9.4 | 47.0 | 9.4 | c 624 | 9.4 | 47.0 | 50 | 9  | AI0104624 | AI0104624          |
| 552 | 9.4 | 47.0 | 9.4 | c 625 | 9.4 | 47.0 | 50 | 9  | AI0104965 | AI0104965          |
| 553 | 9.4 | 47.0 | 9.4 | 626   | 9.4 | 47.0 | 50 | 9  | AI0105016 | AI0105016          |
| 554 | 9.4 | 47.0 | 9.4 | c 627 | 9.4 | 47.0 | 50 | 9  | AI0105285 | AI0105285          |
| 555 | 9.4 | 47.0 | 9.4 | c 628 | 9.4 | 47.0 | 50 | 9  | AI0105494 | AI0105494          |
| 556 | 9.4 | 47.0 | 9.4 | c 629 | 9.4 | 47.0 | 50 | 9  | AI0105989 | AI0105989          |
| 557 | 9.4 | 47.0 | 9.4 | c 630 | 9.4 | 47.0 | 50 | 9  | AI0106027 | AI0106027          |
| 558 | 9.4 | 47.0 | 9.4 | 631   | 9.4 | 47.0 | 50 | 9  | AI0106514 | AI0106514          |
| 559 | 9.4 | 47.0 | 9.4 | 632   | 9.4 | 47.0 | 50 | 9  | AI0106526 | AI0106526          |
| 560 | 9.4 | 47.0 | 9.4 | c 633 | 9.4 | 47.0 | 50 | 9  | AI0106526 | AI0106526          |
| 561 | 9.4 | 47.0 | 9.4 | c 634 | 9.4 | 47.0 | 50 | 9  | AI0106715 | AI0106715          |
| 562 | 9.4 | 47.0 | 9.4 | c 635 | 9.4 | 47.0 | 50 | 9  | AI0106717 | AI0106717          |
| 563 | 9.4 | 47.0 | 9.4 | c 636 | 9.4 | 47.0 | 50 | 9  | AI0106718 | AI0106718          |
| 564 | 9.4 | 47.0 | 9.4 | c 637 | 9.4 | 47.0 | 50 | 9  | AI0106719 | AI0106719          |
| 565 | 9.4 | 47.0 | 9.4 | c 638 | 9.4 | 47.0 | 50 | 9  | AI0106720 | AI0106720          |
| 566 | 9.4 | 47.0 | 9.4 | c 639 | 9.4 | 47.0 | 50 | 9  | AI0106721 | AI0106721          |
| 567 | 9.4 | 47.0 | 9.4 | c 640 | 9.4 | 47.0 | 50 | 9  | AI0106722 | AI0106722          |
| 568 | 9.4 | 47.0 | 9.4 | c 641 | 9.4 | 47.0 | 50 | 9  | AI0106723 | AI0106723          |
| 569 | 9.4 | 47.0 | 9.4 | c 642 | 9.4 | 47.0 | 50 | 9  | AI0106724 | AI0106724          |
| 570 | 9.4 | 47.0 | 9.4 | c 643 | 9.4 | 47.0 | 50 | 9  | AI0106725 | AI0106725          |
| 571 | 9.4 | 47.0 | 9.4 | c 644 | 9.4 | 47.0 | 50 | 9  | AI0106726 | AI0106726          |
| 572 | 9.4 | 47.0 | 9.4 | c 645 | 9.4 | 47.0 | 50 | 9  | AI0106727 | AI0106727          |
| 573 | 9.4 | 47.0 | 9.4 | c 646 | 9.4 | 47.0 | 50 | 9  | AI0106729 | AI0106729          |
| 574 | 9.4 | 47.0 | 9.4 | c 647 | 9.4 | 47.0 | 50 | 9  | AI0106733 | AI0106733          |
| 575 | 9.4 | 47.0 | 9.4 | c 648 | 9.4 | 47.0 | 50 | 9  | AI0106734 | AI0106734          |
| 576 | 9.4 | 47.0 | 9.4 | c 649 | 9.4 | 47.0 | 50 | 9  | AI0106735 | AI0106735          |
| 577 | 9.4 | 47.0 | 9.4 | 650   | 9.4 | 47.0 | 50 | 9  | AI0106830 | AI0106830          |
| 578 | 9.4 | 47.0 | 9.4 | 651   | 9.4 | 47.0 | 50 | 9  | AI0106831 | AI0106831          |
| 579 | 9.4 | 47.0 | 9.4 | c 652 | 9.4 | 47.0 | 50 | 9  | AI0106832 | AI0106832          |
| 580 | 9.4 | 47.0 | 9.4 | c 653 | 9.4 | 47.0 | 50 | 9  | AI0106833 | AI0106833          |
| 581 | 9.4 | 47.0 | 9.4 | c 654 | 9.4 | 47.0 | 50 | 9  | AI0107447 | AI0107447          |
| 582 | 9.4 | 47.0 | 9.4 | c 655 | 9.4 | 47.0 | 50 | 9  | AI0107448 | AI0107448          |
| 583 | 9.4 | 47.0 | 9.4 | 656   | 9.4 | 47.0 | 50 | 9  | AI0107494 | AI0107494          |
| 584 | 9.4 | 47.0 | 9.4 | 657   | 9.4 | 47.0 | 50 | 9  | H80861    | H80861             |
| 585 | 9.4 | 47.0 | 9.4 | c 658 | 9.4 | 47.0 | 50 | 14 | T47394    | T47394             |
| 586 | 9.4 | 47.0 | 9.4 | c 659 | 9.4 | 47.0 | 50 | 17 | AZ2828565 | AZ2828565          |
| 587 | 9.4 | 47.0 | 9.4 | c 660 | 9.4 | 47.0 | 50 | 17 | AZ942114  | AZ942114           |
| 588 | 9.4 | 47.0 | 9.4 | c 661 | 9.4 | 47.0 | 50 | 17 | BH814292  | BH814292           |
| 589 | 9.4 | 47.0 | 9.4 | 662   | 9.4 | 47.0 | 50 | 17 | BH852799  | BH852799           |
| 590 | 9.4 | 47.0 | 9.4 | c 663 | 9.4 | 47.0 | 50 | 17 | TA101G05P | TA101G05P          |

|     |     |      |    |    |           |           |      |     |      |    |    |           |           |            |
|-----|-----|------|----|----|-----------|-----------|------|-----|------|----|----|-----------|-----------|------------|
| 664 | 9.2 | 46.0 | 18 | 13 | HC926609  | HC951-1-G | 7.47 | 9.2 | 46.0 | 43 | 17 | AZ548434  | AZ548434  | 1M0489E15  |
| 665 | 9.2 | 46.0 | 19 | 17 | AZ775273  | AZ775273  | 7.48 | 9.2 | 46.0 | 43 | 17 | HB609433  | HB609433  | HB609433   |
| 666 | 9.2 | 46.0 | 20 | 17 | AZ799042  | AZ799042  | 7.49 | 9.2 | 46.0 | 43 | 17 | HB47687   | HB47687   | SALK 0558  |
| 667 | 9.2 | 46.0 | 22 | 17 | AZ481692  | AZ481692  | 7.49 | 9.2 | 46.0 | 43 | 17 | AL764020  | AL764020  | AL764020   |
| 668 | 9.2 | 46.0 | 22 | 17 | AZ824852  | AZ824852  | 7.49 | 9.2 | 46.0 | 43 | 17 | AVR42733  | AVR42733  | AVR42733   |
| 669 | 9.2 | 46.0 | 22 | 17 | AL110020  | AL110020  | 7.49 | 9.2 | 46.0 | 43 | 17 | AL110020  | AL110020  | AL110020   |
| 670 | 9.2 | 46.0 | 22 | 17 | AZ801483  | AZ801483  | 7.49 | 9.2 | 46.0 | 43 | 17 | AL1059368 | AL1059368 | AL1059368  |
| 671 | 9.2 | 46.0 | 24 | 17 | AZ466164  | AZ466164  | 7.49 | 9.2 | 46.0 | 43 | 17 | AL1077137 | AL1077137 | AL1077137  |
| 672 | 9.2 | 46.0 | 25 | 9  | AA903841  | AA903841  | 7.49 | 9.2 | 46.0 | 43 | 17 | AZ629043  | AZ629043  | 1M0481E18  |
| 673 | 9.2 | 46.0 | 25 | 14 | H26073    | H26073    | 7.49 | 9.2 | 46.0 | 43 | 17 | AZ656493  | AZ656493  | 1M042104   |
| 674 | 9.2 | 46.0 | 25 | 14 | H26073    | H26073    | 7.49 | 9.2 | 46.0 | 43 | 17 | AZ656493  | AZ656493  | 1M042104   |
| 675 | 9.2 | 46.0 | 25 | 17 | AZ462652  | AZ462652  | 7.49 | 9.2 | 46.0 | 43 | 17 | AZ862805  | AZ862805  | 2M0170H11  |
| 676 | 9.2 | 46.0 | 27 | 13 | HC927944  | HC927944  | 7.49 | 9.2 | 46.0 | 43 | 17 | HB620361  | HB620361  | 1M0700500  |
| 677 | 9.2 | 46.0 | 28 | 9  | AL174152  | AL174152  | 7.50 | 9.2 | 46.0 | 43 | 17 | AL770452  | AL770452  | AL770452   |
| 678 | 9.2 | 46.0 | 29 | 17 | AQ074997  | AQ074997  | 7.50 | 9.2 | 46.0 | 43 | 17 | AL104802H | AL104802H | AL104802H  |
| 679 | 9.2 | 46.0 | 29 | 17 | AZ444909  | AZ444909  | 7.50 | 9.2 | 46.0 | 43 | 17 | AL142444  | AL142444  | SWAC/AL109 |
| 680 | 9.2 | 46.0 | 31 | 9  | AA954730  | AA954730  | 7.52 | 9.2 | 46.0 | 43 | 17 | AL4866    | AL4866    | HMSJY 425  |
| 681 | 9.2 | 46.0 | 31 | 14 | W40581    | W40581    | 7.53 | 9.2 | 46.0 | 43 | 17 | AZ480544  | AZ480544  | 1M0402H07  |
| 682 | 9.2 | 46.0 | 31 | 17 | DR19851   | DR19851   | 7.54 | 9.2 | 46.0 | 43 | 17 | AL770613  | AL770613  | AL770613   |
| 683 | 9.2 | 46.0 | 31 | 9  | AL194433  | AL194433  | 7.55 | 9.2 | 46.0 | 43 | 17 | TA324E02Q | TA324E02Q | TA324E02Q  |
| 684 | 9.2 | 46.0 | 31 | 9  | AL3144606 | AL3144606 | 7.56 | 9.2 | 46.0 | 43 | 17 | AL1405442 | AL1405442 | AL1405442  |
| 685 | 9.2 | 46.0 | 31 | 9  | AL355129  | AL355129  | 7.57 | 9.2 | 46.0 | 43 | 17 | AL1687405 | AL1687405 | 1P95108.8  |
| 686 | 9.2 | 46.0 | 31 | 9  | AA189011  | AA189011  | 7.58 | 9.2 | 46.0 | 43 | 9  | AA1890047 | AA1890047 | 2P40404.1  |
| 687 | 9.2 | 46.0 | 31 | 9  | AA581300  | AA581300  | 7.59 | 9.2 | 46.0 | 43 | 9  | AA195508  | AA195508  | 2P40404.1  |
| 688 | 9.2 | 46.0 | 31 | 14 | W40581    | W40581    | 7.60 | 9.2 | 46.0 | 43 | 14 | BJ039761  | BJ039761  | BJ039761   |
| 689 | 9.2 | 46.0 | 31 | 17 | DR19851   | DR19851   | 7.61 | 9.2 | 46.0 | 43 | 14 | TA9694    | TA9694    | Y478411.81 |
| 690 | 9.2 | 46.0 | 31 | 17 | DR19851   | DR19851   | 7.62 | 9.2 | 46.0 | 43 | 17 | AZ489801  | AZ489801  | 1M0422M20  |
| 691 | 9.2 | 46.0 | 32 | 12 | BF140029  | BF140029  | 7.63 | 9.2 | 46.0 | 43 | 17 | AZ662880  | AZ662880  | 1M0542A16  |
| 692 | 9.2 | 46.0 | 32 | 17 | AZ774418  | AZ774418  | 7.64 | 9.2 | 46.0 | 43 | 17 | AZ768666  | AZ768666  | 1M0568E17  |
| 693 | 9.2 | 46.0 | 34 | 9  | AA694037  | AA694037  | 7.65 | 9.2 | 46.0 | 43 | 17 | HB645320  | HB645320  | 1M0800A41  |
| 694 | 9.2 | 46.0 | 34 | 9  | AA887590  | AA887590  | 7.66 | 9.2 | 46.0 | 43 | 17 | HB857599  | HB857599  | SALK 0169  |
| 695 | 9.2 | 46.0 | 34 | 9  | AU256102  | AU256102  | 7.67 | 9.2 | 46.0 | 43 | 9  | AA486931  | AA486931  | AB17411.1  |
| 696 | 9.2 | 46.0 | 35 | 2  | BSM004217 | BSM004217 | 7.68 | 9.2 | 46.0 | 43 | 14 | HL9789    | HL9789    | Y060412.11 |
| 697 | 9.2 | 46.0 | 35 | 17 | HB851566  | HB851566  | 7.69 | 9.2 | 46.0 | 43 | 17 | AZ604015  | AZ604015  | 1M0422104  |
| 698 | 9.2 | 46.0 | 35 | 17 | HB851566  | HB851566  | 7.70 | 9.2 | 46.0 | 43 | 17 | AL771281  | AL771281  | AL771281   |
| 699 | 9.2 | 46.0 | 35 | 17 | TA111105Q | TA111105Q | 7.71 | 9.2 | 46.0 | 43 | 14 | HA6918    | HA6918    | Y015109.81 |
| 700 | 9.2 | 46.0 | 35 | 17 | TA111105Q | TA111105Q | 7.72 | 9.2 | 46.0 | 43 | 17 | AL755122  | AL755122  | AL755122   |
| 701 | 9.2 | 46.0 | 36 | 10 | AVR47544  | AVR47544  | 7.73 | 9.2 | 46.0 | 43 | 9  | AA889285  | AA889285  | AK1602.18  |
| 702 | 9.2 | 46.0 | 36 | 13 | IM400062  | IM400062  | 7.74 | 9.2 | 46.0 | 43 | 9  | AL159041  | AL159041  | Y284001.1  |
| 703 | 9.2 | 46.0 | 36 | 17 | AZ591142  | AZ591142  | 7.75 | 9.2 | 46.0 | 43 | 9  | AL1287232 | AL1287232 | Y284002.8  |
| 704 | 9.2 | 46.0 | 36 | 17 | HB849581  | HB849581  | 7.76 | 9.2 | 46.0 | 43 | 9  | AL185645  | AL185645  | mod74004.8 |
| 705 | 9.2 | 46.0 | 37 | 9  | AL109506  | AL109506  | 7.77 | 9.2 | 46.0 | 43 | 9  | AL163482  | AL163482  | 1M62410.8  |
| 706 | 9.2 | 46.0 | 37 | 17 | AZ792426  | AZ792426  | 7.78 | 9.2 | 46.0 | 43 | 9  | AL195645  | AL195645  | AL195645   |
| 707 | 9.2 | 46.0 | 38 | 10 | AVR43424  | AVR43424  | 7.79 | 9.2 | 46.0 | 43 | 9  | AA400193  | AA400193  | Y284008.8  |
| 708 | 9.2 | 46.0 | 38 | 10 | HB849581  | HB849581  | 7.80 | 9.2 | 46.0 | 43 | 9  | AA451766  | AA451766  | Y284008.1  |
| 709 | 9.2 | 46.0 | 38 | 17 | HB849581  | HB849581  | 7.81 | 9.2 | 46.0 | 43 | 9  | AA519605  | AA519605  | 1P3312.12  |
| 710 | 9.2 | 46.0 | 39 | 17 | AZ499899  | AZ499899  | 7.82 | 9.2 | 46.0 | 43 | 10 | AVR43425  | AVR43425  | AVR43425   |
| 711 | 9.2 | 46.0 | 39 | 17 | HB813715  | HB813715  | 7.83 | 9.2 | 46.0 | 43 | 16 | AVR59223  | AVR59223  | AVR59223   |
| 712 | 9.2 | 46.0 | 40 | 9  | AA877825  | AA877825  | 7.84 | 9.2 | 46.0 | 43 | 10 | AVR59229  | AVR59229  | AVR59229   |
| 713 | 9.2 | 46.0 | 40 | 9  | AA888208  | AA888208  | 7.85 | 9.2 | 46.0 | 43 | 17 | HB811628  | HB811628  | SALK 0792  |
| 714 | 9.2 | 46.0 | 40 | 9  | AL444492  | AL444492  | 7.86 | 9.2 | 46.0 | 43 | 9  | AL1016948 | AL1016948 | mod74002.8 |
| 715 | 9.2 | 46.0 | 40 | 9  | AA206512  | AA206512  | 7.87 | 9.2 | 46.0 | 43 | 9  | AL102467  | AL102467  | AL102467   |
| 716 | 9.2 | 46.0 | 40 | 14 | BJ034050  | BJ034050  | 7.88 | 9.2 | 46.0 | 43 | 9  | AL102702  | AL102702  | AL102702   |
| 717 | 9.2 | 46.0 | 40 | 17 | HB800126  | HB800126  | 7.89 | 9.2 | 46.0 | 43 | 9  | AL104611  | AL104611  | AL104611   |
| 718 | 9.2 | 46.0 | 40 | 17 | HB84669   | HB84669   | 7.90 | 9.2 | 46.0 | 43 | 9  | AL104724  | AL104724  | AL104724   |
| 719 | 9.2 | 46.0 | 40 | 17 | HB84669   | HB84669   | 7.91 | 9.2 | 46.0 | 43 | 9  | AL104845  | AL104845  | AL104845   |
| 720 | 9.2 | 46.0 | 40 | 17 | HB84669   | HB84669   | 7.92 | 9.2 | 46.0 | 43 | 9  | AL104911  | AL104911  | AL104911   |
| 721 | 9.2 | 46.0 | 40 | 17 | HB84669   | HB84669   | 7.93 | 9.2 | 46.0 | 43 | 9  | AL104101  | AL104101  | AL104101   |
| 722 | 9.2 | 46.0 | 41 | 17 | AZ470757  | AZ470757  | 7.94 | 9.2 | 46.0 | 43 | 9  | AL104116  | AL104116  | AL104116   |
| 723 | 9.2 | 46.0 | 42 | 13 | BJ079259  | BJ079259  | 7.95 | 9.2 | 46.0 | 43 | 9  | AL104118  | AL104118  | AL104118   |
| 724 | 9.2 | 46.0 | 42 | 17 | HB757135  | HB757135  | 7.96 | 9.2 | 46.0 | 43 | 9  | AL104317  | AL104317  | AL104317   |
| 725 | 9.2 | 46.0 | 42 | 17 | HB757135  | HB757135  | 7.97 | 9.2 | 46.0 | 43 | 9  | AL105662  | AL105662  | AL105662   |
| 726 | 9.2 | 46.0 | 42 | 17 | HB757135  | HB757135  | 7.98 | 9.2 | 46.0 | 43 | 9  | AL105790  | AL105790  | AL105790   |
| 727 | 9.2 | 46.0 | 42 | 17 | HB806427  | HB806427  | 7.99 | 9.2 | 46.0 | 43 | 9  | AL106413  | AL106413  | AL106413   |
| 728 | 9.2 | 46.0 | 42 | 17 | HB806427  | HB806427  | 8.00 | 9.2 | 46.0 | 43 | 9  | AL106418  | AL106418  | AL106418   |
| 729 | 9.2 | 46.0 | 43 | 9  | AA718019  | AA718019  | 8.01 | 9.2 | 46.0 | 43 | 9  | AL106420  | AL106420  | AL106420   |
| 730 | 9.2 | 46.0 | 43 | 9  | AA572845  | AA572845  | 8.02 | 9.2 | 46.0 | 43 | 9  | AL106463  | AL106463  | AL106463   |
| 731 | 9.2 | 46.0 | 43 | 9  | AA985476  | AA985476  | 8.03 | 9.2 | 46.0 | 43 | 9  | AL106466  | AL106466  | AL106466   |
| 732 | 9.2 | 46.0 | 43 | 9  | AA1930709 | AA1930709 | 8.04 | 9.2 | 46.0 | 43 | 9  | AL106600  | AL106600  | AL106600   |
| 733 | 9.2 | 46.0 | 43 | 9  | AA171959  | AA171959  | 8.05 | 9.2 | 46.0 | 43 | 9  | AL106601  | AL106601  | AL106601   |
| 734 | 9.2 | 46.0 | 43 | 9  | AA1260188 | AA1260188 | 8.06 | 9.2 | 46.0 | 43 | 9  | AL106602  | AL106602  | AL106602   |
| 735 | 9.2 | 46.0 | 43 | 10 | AVR47581  | AVR47581  | 8.07 | 9.2 | 46.0 | 43 | 9  | AL106604  | AL106604  | AL106604   |
| 736 | 9.2 | 46.0 | 43 | 14 | 1P67704   | 1P67704   | 8.09 | 9.2 | 46.0 | 43 | 9  | AL107202  | AL107202  | AL107202   |
| 737 | 9.2 | 46.0 | 43 | 14 | 1P67704   | 1P67704   | 8.09 | 9.2 | 46.0 | 43 | 9  | AL107205  | AL107205  | AL107205   |



|     |     |      |    |    |             |             |                    |     |   |      |    |    |           |
|-----|-----|------|----|----|-------------|-------------|--------------------|-----|---|------|----|----|-----------|
| 810 | 9.2 | 46.0 | 50 | 9  | AU107206    | AU107206    | AU107206           | 883 | 9 | 45.0 | 40 | 12 | BF343276  |
| 811 | 9.2 | 46.0 | 50 | 9  | AU107207    | AU107207    | AU107207           | 884 | 9 | 45.0 | 40 | 14 | H30578    |
| 812 | 9.2 | 46.0 | 50 | 9  | AU107209    | AU107209    | AU107209           | 885 | 9 | 45.0 | 40 | 14 | T89279    |
| 813 | 9.2 | 46.0 | 50 | 9  | AU107211    | AU107211    | AU107211           | 886 | 9 | 45.0 | 41 | 17 | A2798767  |
| 814 | 9.2 | 46.0 | 50 | 9  | AU107213    | AU107213    | AU107213           | 887 | 9 | 45.0 | 41 | 17 | A2663413  |
| 815 | 9.2 | 46.0 | 50 | 9  | AU107216    | AU107216    | AU107216           | 888 | 9 | 45.0 | 41 | 17 | HH09488   |
| 816 | 9.2 | 46.0 | 50 | 9  | AU107412    | AU107412    | AU107412           | 889 | 9 | 45.0 | 41 | 17 | TA2028010 |
| 817 | 9.2 | 46.0 | 50 | 9  | AU107621    | AU107621    | AU107621           | 890 | 9 | 45.0 | 41 | 17 | TA381G120 |
| 818 | 9.2 | 46.0 | 50 | 9  | AU107622    | AU107622    | AU107622           | 891 | 9 | 45.0 | 42 | 13 | B1769932  |
| 819 | 9.2 | 46.0 | 50 | 9  | AU107980    | AU107980    | AU107980           | 892 | 9 | 45.0 | 42 | 13 | A2465429  |
| 820 | 9.2 | 46.0 | 50 | 9  | AU108091    | AU108091    | AU108091           | 893 | 9 | 45.0 | 42 | 17 | A266806   |
| 821 | 9.2 | 46.0 | 50 | 9  | AU108092    | AU108092    | AU108092           | 894 | 9 | 45.0 | 43 | 9  | AA948558  |
| 822 | 9.2 | 46.0 | 50 | 12 | BE732496    | BE732496    | 601567696          | 895 | 9 | 45.0 | 43 | 9  | AA956149  |
| 823 | 9.2 | 46.0 | 50 | 13 | B1708558    | B1708558    | fs56c08.y          | 896 | 9 | 45.0 | 43 | 9  | AA996149  |
| 824 | 9.2 | 46.0 | 50 | 14 | BQ625915    | BQ625915    | ph86105.y          | 897 | 9 | 45.0 | 43 | 9  | A1356829  |
| 825 | 9.2 | 46.0 | 50 | 14 | BQ742798    | BQ742798    | saq56b10.y         | 898 | 9 | 45.0 | 43 | 13 | B1690746  |
| 826 | 9.2 | 46.0 | 50 | 17 | AF087397    | AF087397    | AF087397           | 899 | 9 | 45.0 | 43 | 14 | W60657    |
| 827 | 9.2 | 46.0 | 50 | 17 | AZ917998    | AZ917998    | 1006002H0          | 900 | 9 | 45.0 | 43 | 17 | HH07286   |
| 828 | 9.2 | 46.0 | 50 | 17 | BH626480    | BH626480    | 1007109H0          | 901 | 9 | 45.0 | 44 | 9  | AU259133  |
| 829 | 9.2 | 46.0 | 50 | 19 | AZ422531    | AZ422531    | 1M0201E16          | 902 | 9 | 45.0 | 44 | 14 | D67719    |
| 830 | 9.2 | 46.0 | 50 | 17 | AZ375604    | AZ375604    | 1M0129L06          | 903 | 9 | 45.0 | 44 | 17 | BH643282  |
| 831 | 9.2 | 46.0 | 50 | 22 | AA868842    | AA868842    | ak54g08.s          | 904 | 9 | 45.0 | 44 | 17 | BH666215  |
| 832 | 9.2 | 46.0 | 50 | 22 | AZ312656    | AZ312656    | 1M0028J14          | 905 | 9 | 45.0 | 45 | 17 | A2635574  |
| 833 | 9.2 | 46.0 | 50 | 23 | AZ958029    | AZ958029    | 2M0225D11          | 906 | 9 | 45.0 | 45 | 17 | HH664498  |
| 834 | 9.2 | 46.0 | 50 | 9  | A1074857    | A1074857    | oy27b11.s          | 907 | 9 | 45.0 | 45 | 17 | HH664499  |
| 835 | 9.2 | 46.0 | 50 | 17 | AZ435187    | AZ435187    | 1M0222E04          | 908 | 9 | 45.0 | 46 | 9  | AA847140  |
| 836 | 9.2 | 46.0 | 50 | 17 | AZ759958    | AZ759958    | 1M0553C13          | 909 | 9 | 45.0 | 46 | 9  | AA869188  |
| 837 | 9.2 | 46.0 | 50 | 17 | PCB303945   | PCB303945   | Plasmog14          | 910 | 9 | 45.0 | 46 | 9  | AA910510  |
| 838 | 9.2 | 46.0 | 50 | 17 | AZ588433    | AZ588433    | 1M0396G14          | 911 | 9 | 45.0 | 46 | 9  | AA929658  |
| 839 | 9.2 | 46.0 | 50 | 28 | AZ618471    | AZ618471    | 1M0450011          | 912 | 9 | 45.0 | 46 | 9  | A1155176  |
| 840 | 9.2 | 46.0 | 50 | 29 | AZ387832    | AZ387832    | 1M0147F23          | 913 | 9 | 45.0 | 46 | 9  | A1191727  |
| 841 | 9.2 | 46.0 | 50 | 29 | AZ814996    | AZ814996    | 2M0083B05          | 914 | 9 | 45.0 | 46 | 9  | A1361593  |
| 842 | 9.2 | 46.0 | 50 | 30 | AZ658107    | AZ658107    | 1M0534M12          | 915 | 9 | 45.0 | 46 | 9  | AA869188  |
| 843 | 9.2 | 46.0 | 50 | 30 | PH810436    | PH810436    | SAIK_0495          | 916 | 9 | 45.0 | 46 | 13 | A1957210  |
| 844 | 9.2 | 46.0 | 50 | 31 | AA266787    | AA266787    | m298a07.r          | 917 | 9 | 45.0 | 46 | 13 | B1915632  |
| 845 | 9.2 | 46.0 | 50 | 31 | BG929146    | BG929146    | HNC11-1-H          | 918 | 9 | 45.0 | 46 | 13 | B1915632  |
| 846 | 9.2 | 46.0 | 50 | 32 | AZ504201    | AZ504201    | 1M0344K13          | 919 | 9 | 45.0 | 46 | 13 | B0337190  |
| 847 | 9.2 | 46.0 | 50 | 32 | AZ630696    | AZ630696    | 1M0484H23          | 920 | 9 | 45.0 | 46 | 14 | T73797    |
| 848 | 9.2 | 46.0 | 50 | 33 | AZ379585    | AZ379585    | 1M0134P16          | 921 | 9 | 45.0 | 46 | 14 | T73797    |
| 849 | 9.2 | 46.0 | 50 | 33 | TA227D09Q   | TA227D09Q   | AL479999 T. brucei | 922 | 9 | 45.0 | 46 | 17 | AQ073659  |
| 850 | 9.2 | 46.0 | 50 | 34 | AA869975    | AA869975    | va10a06.r          | 923 | 9 | 45.0 | 46 | 17 | A276466   |
| 851 | 9.2 | 46.0 | 50 | 34 | AA931343    | AA931343    | oc06e02.s          | 924 | 9 | 45.0 | 46 | 17 | A2785255  |
| 852 | 9.2 | 46.0 | 50 | 34 | A1528944    | A1528944    | ud43c06.y          | 925 | 9 | 45.0 | 46 | 17 | HH48546   |
| 853 | 9.2 | 46.0 | 50 | 34 | AA389463    | AA389463    | mp25e07.r          | 926 | 9 | 45.0 | 46 | 17 | HH663110  |
| 854 | 9.2 | 46.0 | 50 | 34 | AZ602397    | AZ602397    | 1M0421F12          | 927 | 9 | 45.0 | 47 | 13 | HH663110  |
| 855 | 9.2 | 46.0 | 50 | 34 | AZ832181    | AZ832181    | 2M0112K19          | 928 | 9 | 45.0 | 47 | 13 | HH663110  |
| 856 | 9.2 | 46.0 | 50 | 34 | AL759526    | AL759526    | Arabisdops         | 929 | 9 | 45.0 | 47 | 17 | A2776768  |
| 857 | 9.2 | 46.0 | 50 | 35 | AQ024992    | AQ024992    | EP(210937          | 930 | 9 | 45.0 | 47 | 17 | A2849585  |
| 858 | 9.2 | 46.0 | 50 | 35 | AZ485619    | AZ485619    | 1M0313G10          | 931 | 9 | 45.0 | 48 | 14 | H93557    |
| 859 | 9.2 | 46.0 | 50 | 35 | HH96557     | HH96557     | 3526_1_4-          | 932 | 9 | 45.0 | 48 | 17 | A2765963  |
| 860 | 9.2 | 46.0 | 50 | 36 | BJ066815    | BJ066815    | RJ066815           | 933 | 9 | 45.0 | 48 | 17 | A2828525  |
| 861 | 9.2 | 46.0 | 50 | 36 | AZ309331    | AZ309331    | 1M0013021          | 934 | 9 | 45.0 | 48 | 17 | HH629491  |
| 862 | 9.2 | 46.0 | 50 | 36 | AZ385555    | AZ385555    | 1M0144A11          | 935 | 9 | 45.0 | 48 | 17 | HH790361  |
| 863 | 9.2 | 46.0 | 50 | 36 | AZ482120    | AZ482120    | 1M0307L06          | 936 | 9 | 45.0 | 48 | 17 | HH790361  |
| 864 | 9.2 | 46.0 | 50 | 36 | AZ812622    | AZ812622    | 2M0079K21          | 937 | 9 | 45.0 | 49 | 9  | A1119487  |
| 865 | 9.2 | 46.0 | 50 | 37 | AA681821    | AA681821    | vu65b03.r          | 938 | 9 | 45.0 | 49 | 9  | A1900473  |
| 866 | 9.2 | 46.0 | 50 | 37 | AL208016    | AL208016    | qf60f11.x          | 939 | 9 | 45.0 | 49 | 9  | AA479811  |
| 867 | 9.2 | 46.0 | 50 | 37 | AV834036    | AV834036    | AV834036           | 940 | 9 | 45.0 | 49 | 12 | AA531822  |
| 868 | 9.2 | 46.0 | 50 | 37 | AV953936    | AV953936    | AV953936           | 941 | 9 | 45.0 | 49 | 17 | AA531822  |
| 869 | 9.2 | 46.0 | 50 | 37 | BE739565    | BE739565    | 601556525          | 942 | 9 | 45.0 | 49 | 17 | AA531822  |
| 870 | 9.2 | 46.0 | 50 | 37 | AQ025329    | AQ025329    | EP(X)0385          | 943 | 9 | 45.0 | 49 | 17 | AA531822  |
| 871 | 9.2 | 46.0 | 50 | 37 | AQ025713    | AQ025713    | 1(2)K0260          | 944 | 9 | 45.0 | 49 | 17 | AA531822  |
| 872 | 9.2 | 46.0 | 50 | 37 | AZ592491    | AZ592491    | 1M0403019          | 945 | 9 | 45.0 | 49 | 17 | AA531822  |
| 873 | 9.2 | 46.0 | 50 | 37 | TA166E03P   | TA166E03P   | TA166E03P          | 946 | 9 | 45.0 | 49 | 17 | AA531822  |
| 874 | 9.2 | 46.0 | 50 | 38 | TA2142      | TA2142      | yb25b11.s1         | 947 | 9 | 45.0 | 49 | 17 | AA531822  |
| 875 | 9.2 | 46.0 | 50 | 38 | AZ471114    | AZ471114    | 1M0192H09          | 948 | 9 | 45.0 | 49 | 17 | AA531822  |
| 876 | 9.2 | 46.0 | 50 | 38 | AZ776209    | AZ776209    | 2M0009J10          | 949 | 9 | 45.0 | 50 | 9  | AA531822  |
| 877 | 9.2 | 46.0 | 50 | 38 | AL771775    | AL771775    | Arabisdops         | 950 | 9 | 45.0 | 50 | 9  | AA531822  |
| 878 | 9.2 | 46.0 | 50 | 39 | 12 BG495089 | 12 BG495089 | 602540488          | 951 | 9 | 45.0 | 50 | 9  | AA531822  |
| 879 | 9.2 | 46.0 | 50 | 39 | C53677      | C53677      | C53677 Yuji        | 952 | 9 | 45.0 | 50 | 9  | AA531822  |
| 880 | 9.2 | 46.0 | 50 | 40 | AA928240    | AA928240    | on87c07.s          | 953 | 9 | 45.0 | 50 | 9  | AA531822  |
| 881 | 9.2 | 46.0 | 50 | 40 | AA989922    | AA989922    | ua51e03.r          | 954 | 9 | 45.0 | 50 | 9  | AA531822  |
| 882 | 9.2 | 46.0 | 50 | 40 | AA633028    | AA633028    | nq09f07.s          | 955 | 9 | 45.0 | 50 | 9  | AA531822  |



elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at [http://signal.salk.edu/ttna\\_protocols.html](http://signal.salk.edu/ttna_protocols.html)

BASE COUNT 12 a 10 c 6 g 18 t  
ORIGIN

Query Match 64.0% Score 12.8; DB 17; Length 46;  
Best local Similarity 87.5% Pred. No. 4.7e+04;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GACTTCCTCCGCTG 19  
T T T T T T T T T T  
Db 24 GACTTCCTCCGCTG 49

RESULT 4  
AL628983  
DEFINITION AL628983 X3C-gastrula Silurana tropicalis cDNA clone (6a5011416.5),  
mRNA sequence.  
ACCESSION AL628983  
VERSION AL628983.1 GI:16598466  
KEYWORDS EST.  
SOURCE Western clawed frog.  
ORGANISM Silurana tropicalis

REFERENCE 1 (bases 1 to 50)  
AUTHORS Huckle, E., Taylor, R., Ashurst, J. L., Zorn, A. M., and Rogers, J.  
TITLE Sanger Xenopus tropicalis EST project 2001 (10\_2001)  
JOURNAL Unpublished (2001)  
COMMENT Contact: Huckle E  
Sanger Centre  
HinXton, Cambridgeshire, CB10 1SA, UK  
Email: trop@sanger.ac.uk

BASE COUNT 14 a 9 c 19 g 8 t  
ORIGIN  
/organism="Silurana tropicalis"  
/db\_xref="taxon:8364"  
/clone="6a5011416"  
/clone\_lib="X3C-gastrula"  
/dev\_stage="gastrula (stages 10.5-13 mixed)"  
/lab\_host="Escherichia coli XL1 blue"  
/note="Vector: pCS107; Site 1: EcoRI; Site 2: NotI; cDNA was oligo dt primed from 5' of poly A+ RNA from stages 10-13 gastrulae; EcoRI-NotI cut cDNA was then ligated into pCS107 with EcoRI at the 5' end and NotI at the 3' end."  
Query Match 64.0% Score 12.8; DB 9; Length 50;  
Best local Similarity 87.5% Pred. No. 4.9e+04;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GACTTCCTCCGCTG 16  
T T T T T T T T T T  
Db 4 GACTTCCTCCGCTG 27

RESULT 4  
TA37H02P  
KEYWORDS TA37H02P  
DEFINITION T. brucei sheared genomic DNA clone (7h02), forward sequence,  
genomic survey sequence.  
ACCESSION AL454061

BASE COUNT 38 bp DNA linear GSS 13-DEC-2000  
ORIGIN  
/organism="Trypanosoma brucei"  
/db\_xref="taxon:5691"  
/clone="37h02"  
/clone\_lib="TREP027"  
/dev\_stage="total\_fetus\_NU2H8.9w Homo sapiens cDNA clone IMAGE:1658584 3' similar to TR:Q41707 Q41707 EXTENSION CLASS 1 PROTEIN PRECURSOR. 3; mRNA sequence.  
ACCESSION AL084943  
VERSION AL084943.1 GI:4277687  
KEYWORDS EST.  
SOURCE Human.  
ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 43)  
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.  
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP).  
JOURNAL Tumor Gene Index  
COMMENT Unpublished (1997)  
Contact: Robert Strausberg, Ph.D.  
Email: capus@mail.nih.gov  
This clone is available royalty-free through HINX; contact the IMAGE Consortium ([info:image.hinx.gov](mailto:info:image.hinx.gov)) for further information.  
Insert length 332 Std Error: 0.00  
Seq primer: -40mlx fwd. ET from Amersham  
High quality sequence stop: 1.  
Location/Qualifiers 1..343

BASE COUNT 6 a 9 c 15 g 8 t  
ORIGIN  
/organism="Trypanosoma brucei"  
/strain="TREP027"  
/db\_xref="taxon:5691"  
/clone="37h02"  
Query Match 62.0% Score 12.4; DB 17; Length 48;  
Best local Similarity 92.9% Pred. No. 6.7e+04;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GACTTCCTCCGCTG 14  
T T T T T T T T T T  
Db 15 GACTTCCTCCGCTG 2

RESULT 5  
AL084943  
DEFINITION AL084943 43 bp mRNA linear EST 24-SEP-1998  
IMAGE:1658584 3' similar to TR:Q41707 Q41707 EXTENSION CLASS 1 PROTEIN PRECURSOR. 3; mRNA sequence.  
ACCESSION AL084943  
VERSION AL084943.1 GI:4277687  
KEYWORDS EST.  
SOURCE Human.  
ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 43)  
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.  
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP).  
JOURNAL Tumor Gene Index  
COMMENT Unpublished (1997)  
Contact: Robert Strausberg, Ph.D.  
Email: capus@mail.nih.gov  
This clone is available royalty-free through HINX; contact the IMAGE Consortium ([info:image.hinx.gov](mailto:info:image.hinx.gov)) for further information.  
Insert length 332 Std Error: 0.00  
Seq primer: -40mlx fwd. ET from Amersham  
High quality sequence stop: 1.  
Location/Qualifiers 1..343

BASE COUNT 6 a 9 c 15 g 8 t  
ORIGIN  
/organism="Trypanosoma brucei"  
/strain="TREP027"  
/db\_xref="taxon:5691"  
/clone="37h02"  
Query Match 62.0% Score 12.4; DB 17; Length 48;  
Best local Similarity 92.9% Pred. No. 6.7e+04;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GACTTCCTCCGCTG 14  
T T T T T T T T T T  
Db 15 GACTTCCTCCGCTG 2

RESULT 5  
AL084943  
DEFINITION AL084943 43 bp mRNA linear EST 24-SEP-1998  
IMAGE:1658584 3' similar to TR:Q41707 Q41707 EXTENSION CLASS 1 PROTEIN PRECURSOR. 3; mRNA sequence.  
ACCESSION AL084943  
VERSION AL084943.1 GI:4277687  
KEYWORDS EST.  
SOURCE Human.  
ORGANISM Homo sapiens

AL454061.1 GI:11854572  
GSS.  
Trypanosoma brucei.  
Trypanosoma brucei.  
Eukaryota; Euklenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.

REFERENCE 1 (bases 1 to 48)  
AUTHORS Hall, N., Bowman, S., Leonard, N. J., Doolette, J., Atkin, R., Phillips, W., C. Arnold, D., Harris, R., El-Sayed, N., Boulton, M., McVillie, S. E., Kojandream, M. A., and Bartrell, B. G.  
TITLE Direct Submission  
JOURNAL Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton, Cambridge CB10 1SA, E-mail: bartrell@sanger.ac.uk and nhl@sanger.ac.uk

COMMENT Constructed at the Institute for Genomic Research (IGR), Rockville, MD. Genomic DNA isolated from a cloned population of Trypanosoma brucei (TREP027/4 Ghat 10.1) was mechanically sheared to give a tight size distribution (4 kb). The v. i method used for the library construction is described in detail in Smith, H. and Venter, J. C. (Making small insert libraries for whole genome shotgun sequencing projects). In Genome Sequencing: A Practical Approach, eds. M. Vaudin and B. Bartrell, Oxford University Press, 1999).  
Email: melsayed@igr.org  
Details of T. brucei sequencing at the Sanger Centre are available at [http://www.sanger.ac.uk/projects/1\\_brucei/](http://www.sanger.ac.uk/projects/1_brucei/).  
Location/Qualifiers 1..48

BASE COUNT 6 a 9 c 15 g 8 t  
ORIGIN  
/organism="Trypanosoma brucei"  
/strain="TREP027"  
/db\_xref="taxon:5691"  
/clone="37h02"

Query Match 62.0% Score 12.4; DB 17; Length 48;  
Best local Similarity 92.9% Pred. No. 6.7e+04;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GACTTCCTCCGCTG 14  
T T T T T T T T T T  
Db 15 GACTTCCTCCGCTG 2

RESULT 5  
AL084943  
DEFINITION AL084943 43 bp mRNA linear EST 24-SEP-1998  
IMAGE:1658584 3' similar to TR:Q41707 Q41707 EXTENSION CLASS 1 PROTEIN PRECURSOR. 3; mRNA sequence.  
ACCESSION AL084943  
VERSION AL084943.1 GI:4277687  
KEYWORDS EST.  
SOURCE Human.  
ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 43)  
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.  
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP).  
JOURNAL Tumor Gene Index  
COMMENT Unpublished (1997)  
Contact: Robert Strausberg, Ph.D.  
Email: capus@mail.nih.gov  
This clone is available royalty-free through HINX; contact the IMAGE Consortium ([info:image.hinx.gov](mailto:info:image.hinx.gov)) for further information.  
Insert length 332 Std Error: 0.00  
Seq primer: -40mlx fwd. ET from Amersham  
High quality sequence stop: 1.  
Location/Qualifiers 1..343

BASE COUNT 6 a 9 c 15 g 8 t  
ORIGIN  
/organism="Trypanosoma brucei"  
/strain="TREP027"  
/db\_xref="taxon:5691"  
/clone="37h02"

Query Match 62.0% Score 12.4; DB 17; Length 48;  
Best local Similarity 92.9% Pred. No. 6.7e+04;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GACTTCCTCCGCTG 14  
T T T T T T T T T T  
Db 15 GACTTCCTCCGCTG 2

RESULT 5  
AL084943  
DEFINITION AL084943 43 bp mRNA linear EST 24-SEP-1998  
IMAGE:1658584 3' similar to TR:Q41707 Q41707 EXTENSION CLASS 1 PROTEIN PRECURSOR. 3; mRNA sequence.  
ACCESSION AL084943  
VERSION AL084943.1 GI:4277687  
KEYWORDS EST.  
SOURCE Human.  
ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 43)  
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.  
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP).  
JOURNAL Tumor Gene Index  
COMMENT Unpublished (1997)  
Contact: Robert Strausberg, Ph.D.  
Email: capus@mail.nih.gov  
This clone is available royalty-free through HINX; contact the IMAGE Consortium ([info:image.hinx.gov](mailto:info:image.hinx.gov)) for further information.  
Insert length 332 Std Error: 0.00  
Seq primer: -40mlx fwd. ET from Amersham  
High quality sequence stop: 1.  
Location/Qualifiers 1..343

BASE COUNT 6 a 9 c 15 g 8 t  
ORIGIN  
/organism="Trypanosoma brucei"  
/strain="TREP027"  
/db\_xref="taxon:5691"  
/clone="37h02"

Query Match 62.0% Score 12.4; DB 17; Length 48;  
Best local Similarity 92.9% Pred. No. 6.7e+04;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 GACTTCCTCCGCTG 14  
T T T T T T T T T T  
Db 15 GACTTCCTCCGCTG 2

RESULT 5  
AL084943  
DEFINITION AL084943 43 bp mRNA linear EST 24-SEP-1998  
IMAGE:1658584 3' similar to TR:Q41707 Q41707 EXTENSION CLASS 1 PROTEIN PRECURSOR. 3; mRNA sequence.  
ACCESSION AL084943  
VERSION AL084943.1 GI:4277687  
KEYWORDS EST.  
SOURCE Human.  
ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 43)  
AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.  
TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP).  
JOURNAL Tumor Gene Index  
COMMENT Unpublished (1997)  
Contact: Robert Strausberg, Ph.D.  
Email: capus@mail.nih.gov  
This clone is available royalty-free through HINX; contact the IMAGE Consortium ([info:image.hinx.gov](mailto:info:image.hinx.gov)) for further information.  
Insert length 332 Std Error: 0.00  
Seq primer: -40mlx fwd. ET from Amersham  
High quality sequence stop: 1.  
Location/Qualifiers 1..343



4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan  
 Email: yasukikjims.u-tokyo.ac.jp  
 Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A., and Suqano  
 S. Construction and characterization of a full length-enriched and  
 a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

## FEATURES

source

Location/Qualifiers

1..50

/organism "Homo sapiens"

/db\_xref "taxon:9606"

/clone "ABSH01541"

/clone\_lib "Suqano Homo sapiens cDNA library"

/note "Differential display comparison of untreated and

dimethylthymate treated 0947 cells"

9 a 23 c 7 q 11 t

## BASE COUNT

ORIGIN

Query Match 61.0% Score 12.2; DB 9; Length 50;

Best Local Similarity 82.4% Pred. No. 9.4e+04;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 GAGAGTCTCTCTGCT 18

1111111111111111

DB 22 GAGAGTCTCTCTGCT 48

## RESULT 9

AUI06400

LOCUS

DEFINITION AUI06400 Suqano Homo sapiens cDNA library Homo sapiens cDNA clone

EST.

KEYWORDS

SOURCE

ORGANISM

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.

1 (bases 1 to 50)

Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata

H., Ota, T., Isoqai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki

Y., Nakamura, Y., Suyama, A., and Suqano, S.

S. Construction and characterization of a full length-enriched and

a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

mapping of mRNA start sites

EMBO Rep. 2 (5), 488-493 (2001)

21270072

Contact: Yutaka Suzuki

Department of Virology

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: yasukikjims.u-tokyo.ac.jp

Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A., and Suqano

S. Construction and characterization of a full length-enriched and

a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

## FEATURES

source

Location/Qualifiers

1..50

/organism "Homo sapiens"

/db\_xref "taxon:9606"

/clone "col00412"

/note "Differential display comparison of untreated and

dimethylthymate treated 0947 cells"

5 a 9 c 16 q 20 t

## BASE COUNT

ORIGIN

Query Match 61.0% Score 12.2; DB 9; Length 50;

Best Local Similarity 82.4% Pred. No. 9.4e+04;

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCTGCT 20

1111111111111111

DB 40 GAGAGTCTCTCTGCT 46

## RESULT 10

AUI06401

LOCUS

DEFINITION AUI06401 Suqano Homo sapiens cDNA library Homo sapiens cDNA clone

EST.

KEYWORDS

SOURCE

ORGANISM

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.

1 (bases 1 to 50)

Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata

H., Ota, T., Isoqai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki

Y., Nakamura, Y., Suyama, A., and Suqano, S.

S. Construction and characterization of a full length-enriched and

a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

mapping of mRNA start sites

EMBO Rep. 2 (5), 488-493 (2001)

21270072

Contact: Yutaka Suzuki

Department of Virology

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: yasukikjims.u-tokyo.ac.jp

Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A., and Suqano

S. Construction and characterization of a full length-enriched and

a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

mapping of mRNA start sites

EMBO Rep. 2 (5), 488-493 (2001)

21270072

Contact: Yutaka Suzuki

Department of Virology

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: yasukikjims.u-tokyo.ac.jp

Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A., and Suqano

S. Construction and characterization of a full length-enriched and

a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

mapping of mRNA start sites

EMBO Rep. 2 (5), 488-493 (2001)

21270072

Contact: Yutaka Suzuki

Department of Virology

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: yasukikjims.u-tokyo.ac.jp

Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A., and Suqano

S. Construction and characterization of a full length-enriched and

a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

mapping of mRNA start sites

EMBO Rep. 2 (5), 488-493 (2001)

21270072

Contact: Yutaka Suzuki

Department of Virology

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: yasukikjims.u-tokyo.ac.jp



```

FEATURES             a 5'-end enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
SOURCE               Location/Qualifiers
   1..50
   /organism="Homo sapiens"
   /db_xref="taxon:9606"
   /clone="ColF0677"
   /clone_lib="Suqano Homo sapiens cDNA library"
   /note="Differential display comparison of untreated and
dimethylumurate treated 0947 cells"
BASE COUNT          5 a 11 c 17 q 17 t
ORIGIN
Query Match          61.0%   Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%   Pred. No. 9,4004;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GGAGTCTCTCTGCGG 20
|||||
DB 28 GGAGTCTCTCTGCGG 44

RESULT 15
AUI06410
LOCUS              50 bp mRNA linear EST 30-AUG-2001
DEFINITION         Suqano Homo sapiens cDNA library Homo sapiens cDNA clone
VERSION            ColF0702, mRNA sequence.
KEYWORDS           EST.
SOURCE             human.
ORGANISM            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
AUTHORS            Suzuki,Y., Iaira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
                   A., Nakamura,Y., Suyama,A. and Sugano,S.
TITLE              Diverse transcriptional initiation revealed by fine, large-scale
                   mapping of mRNA start sites
JOURNAL            EMBO Rep. 2 (5), 388-394 (2001)
MEDLINE            21270072
COMMENT            Contact: Yutaka Suzuki
                   Department of Virology
                   Institute of Medical Science, University of Tokyo
                   4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
                   Email: ysuzuki@ims.u-tokyo.ac.jp
                   Suzuki,Y., Yoshitomo-Nakadawa,K., Maruyama,K., Suyama,A. and Sugano
                   S. Construction and characterization of a full length-enriched and
                   a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                   Location/Qualifiers
                     1..50
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="ColF0702"
                     /clone_lib="Suqano Homo sapiens cDNA library"
                     /note="Differential display comparison of untreated and
                     dimethylumurate treated 0947 cells"
BASE COUNT          5 a 11 c 17 q 17 t
ORIGIN
Query Match          61.0%   Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%   Pred. No. 9,4004;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GGAGTCTCTCTGCGG 20
|||||
DB 28 GGAGTCTCTCTGCGG 44

RESULT 16
AUI06412
LOCUS              50 bp mRNA linear EST 30-AUG-2001
DEFINITION         Suqano Homo sapiens cDNA library Homo sapiens cDNA clone
VERSION            ColF0702, mRNA sequence.
KEYWORDS           EST.
SOURCE             human.
ORGANISM            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
AUTHORS            Suzuki,Y., Iaira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
                   A., Nakamura,Y., Suyama,A. and Sugano,S.
TITLE              Diverse transcriptional initiation revealed by fine, large-scale
                   mapping of mRNA start sites
JOURNAL            EMBO Rep. 2 (5), 388-394 (2001)
MEDLINE            21270072
COMMENT            Contact: Yutaka Suzuki
                   Department of Virology
                   Institute of Medical Science, University of Tokyo
                   4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
                   Email: ysuzuki@ims.u-tokyo.ac.jp
                   Suzuki,Y., Yoshitomo-Nakadawa,K., Maruyama,K., Suyama,A. and Sugano
                   S. Construction and characterization of a full length-enriched and
                   a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                   Location/Qualifiers
                     1..50
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="ColF0702"
                     /clone_lib="Suqano Homo sapiens cDNA library"
                     /note="Differential display comparison of untreated and
                     dimethylumurate treated 0947 cells"
BASE COUNT          5 a 11 c 17 q 17 t
ORIGIN
Query Match          61.0%   Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%   Pred. No. 9,4004;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GGAGTCTCTCTGCGG 20
|||||
DB 28 GGAGTCTCTCTGCGG 44

```

```

FEATURES             a 5'-end enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
SOURCE               Location/Qualifiers
   1..50
   /organism="Homo sapiens"
   /db_xref="taxon:9606"
   /clone="ColF0677"
   /clone_lib="Suqano Homo sapiens cDNA library"
   /note="Differential display comparison of untreated and
dimethylumurate treated 0947 cells"
BASE COUNT          6 a 10 c 17 q 17 t
ORIGIN
Query Match          61.0%   Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%   Pred. No. 9,4004;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GGAGTCTCTCTGCGG 20
|||||
DB 28 GGAGTCTCTCTGCGG 48

RESULT 17
AUI06419
LOCUS              50 bp mRNA linear EST 30-AUG-2001
DEFINITION         Suqano Homo sapiens cDNA library Homo sapiens cDNA clone
VERSION            ColF1524, mRNA sequence.
KEYWORDS           EST.
SOURCE             human.
ORGANISM            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
AUTHORS            Suzuki,Y., Iaira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
                   A., Nakamura,Y., Suyama,A. and Sugano,S.
TITLE              Diverse transcriptional initiation revealed by fine, large-scale
                   mapping of mRNA start sites
JOURNAL            EMBO Rep. 2 (5), 388-394 (2001)
MEDLINE            21270072
COMMENT            Contact: Yutaka Suzuki
                   Department of Virology
                   Institute of Medical Science, University of Tokyo
                   4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
                   Email: ysuzuki@ims.u-tokyo.ac.jp
                   Suzuki,Y., Yoshitomo-Nakadawa,K., Maruyama,K., Suyama,A. and Sugano
                   S. Construction and characterization of a full length-enriched and
                   a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                   Location/Qualifiers
                     1..50
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="ColF0702"
                     /clone_lib="Suqano Homo sapiens cDNA library"
                     /note="Differential display comparison of untreated and
                     dimethylumurate treated 0947 cells"
BASE COUNT          6 a 10 c 17 q 17 t
ORIGIN
Query Match          61.0%   Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%   Pred. No. 9,4004;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GGAGTCTCTCTGCGG 20
|||||
DB 28 GGAGTCTCTCTGCGG 48

RESULT 17
AUI06419
LOCUS              50 bp mRNA linear EST 30-AUG-2001
DEFINITION         Suqano Homo sapiens cDNA library Homo sapiens cDNA clone
VERSION            ColF1524, mRNA sequence.
KEYWORDS           EST.
SOURCE             human.
ORGANISM            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
AUTHORS            Suzuki,Y., Iaira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
                   A., Nakamura,Y., Suyama,A. and Sugano,S.
TITLE              Diverse transcriptional initiation revealed by fine, large-scale
                   mapping of mRNA start sites
JOURNAL            EMBO Rep. 2 (5), 388-394 (2001)
MEDLINE            21270072
COMMENT            Contact: Yutaka Suzuki
                   Department of Virology
                   Institute of Medical Science, University of Tokyo
                   4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
                   Email: ysuzuki@ims.u-tokyo.ac.jp
                   Suzuki,Y., Yoshitomo-Nakadawa,K., Maruyama,K., Suyama,A. and Sugano
                   S. Construction and characterization of a full length-enriched and
                   a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).
                   Location/Qualifiers
                     1..50
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="ColF0702"
                     /clone_lib="Suqano Homo sapiens cDNA library"
                     /note="Differential display comparison of untreated and
                     dimethylumurate treated 0947 cells"
BASE COUNT          6 a 10 c 17 q 17 t
ORIGIN
Query Match          61.0%   Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%   Pred. No. 9,4004;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GGAGTCTCTCTGCGG 20
|||||
DB 28 GGAGTCTCTCTGCGG 48

```

```

source
  1..50
  /organism "Homo sapiens"
  /db_xref "taxon:9606"
  /clone "ColF1679"
  /clone_lib "Sugano Homo sapiens cDNA Library"
  /note "Differential display comparison of untreated and
  dimethylthiourate treated 0947 cells"
  5 a 11 c 17 q 17 t

BASE COUNT
ORIGIN
  4 GAGATTCCTCCCGG 20
  111111111111
  28 GAGATTCCTCCCGG 44

Query Match: 61.0%; Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%; Pred. No. 9.4e+04;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAGATTCCTCCCGG 20
DB 28 GAGATTCCTCCCGG 44

RESULT 19
AUI06421
LOCUS
DEFINITION
  AUI06421 Sugano Homo sapiens cDNA Library EST 30-AUG-2001
  ColF1679, mRNA sequence.
ACCESSION
  AUI06421
VERSION
  AUI06421.1 GI:14555942
KEYWORDS
  EST.
SOURCE
  human.
ORGANISM
  Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
  Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
  H., et al., Tsuda,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
  Y., Nakamura,Y., Suyama,A. and Sugano,S.
  Diverse transcriptional initiation revealed by fine, large scale
  mapping of mRNA start sites
  EMBO Rep. 2 (5), 488-493 (2001)
  Contact: Yutaka Suzuki
  Department of Virology
  Institute of Medical Science, University of Tokyo
  4-6-1, Shirokanedai, Minato-ku, Tokyo 108-8501, Japan
  Email: yusuzuki@ims.u-tokyo.ac.jp
  Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano
  S. Construction and characterization of a full length enriched and
  a 5' end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
  source
    1..50
    /organism "Homo sapiens"
    /db_xref "taxon:9606"
    /clone "ColF1679"
    /clone_lib "Sugano Homo sapiens cDNA Library"
  /note "Differential display comparison of untreated and
  dimethylthiourate treated 0947 cells"
  5 a 11 c 17 q 17 t

Query Match: 61.0%; Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%; Pred. No. 9.4e+04;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAGATTCCTCCCGG 20
DB 28 GAGATTCCTCCCGG 44

RESULT 20
AUI06430
LOCUS
DEFINITION
  AUI06430 Sugano Homo sapiens cDNA Library EST 30-AUG-2001
  ColF1679, mRNA sequence.
ACCESSION
  AUI06430
VERSION
  AUI06430.1 GI:14555951
KEYWORDS
  EST.
SOURCE
  human.
ORGANISM
  Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
  Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
  H., et al., Tsuda,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
  Y., Nakamura,Y., Suyama,A. and Sugano,S.
  Diverse transcriptional initiation revealed by fine, large scale
  mapping of mRNA start sites
  EMBO Rep. 2 (5), 488-493 (2001)
  Contact: Yutaka Suzuki
  Department of Virology
  Institute of Medical Science, University of Tokyo
  4-6-1, Shirokanedai, Minato-ku, Tokyo 108-8501, Japan
  Email: yusuzuki@ims.u-tokyo.ac.jp
  Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano
  S. Construction and characterization of a full length enriched and
  a 5' end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
  source
    1..50
    /organism "Homo sapiens"
    /db_xref "taxon:9606"
    /clone "ColF1679"
    /clone_lib "Sugano Homo sapiens cDNA Library"
  /note "Differential display comparison of untreated and
  dimethylthiourate treated 0947 cells"
  5 a 11 c 17 q 17 t

```

```

source
  1..50
  /organism "Homo sapiens"
  /db_xref "taxon:9606"
  /clone "ColF4011"
  /clone_lib "Sugano Homo sapiens cDNA Library"
  /note "Differential display comparison of untreated and
  dimethylthiourate treated 0947 cells"
  5 a 11 c 17 q 17 t

Query Match: 61.0%; Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%; Pred. No. 9.4e+04;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAGATTCCTCCCGG 20
DB 28 GAGATTCCTCCCGG 44

RESULT 20
AUI06430
LOCUS
DEFINITION
  AUI06430 Sugano Homo sapiens cDNA Library EST 30-AUG-2001
  ColF1679, mRNA sequence.
ACCESSION
  AUI06430
VERSION
  AUI06430.1 GI:14555951
KEYWORDS
  EST.
SOURCE
  human.
ORGANISM
  Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
  Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
  H., et al., Tsuda,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
  Y., Nakamura,Y., Suyama,A. and Sugano,S.
  Diverse transcriptional initiation revealed by fine, large scale
  mapping of mRNA start sites
  EMBO Rep. 2 (5), 488-493 (2001)
  Contact: Yutaka Suzuki
  Department of Virology
  Institute of Medical Science, University of Tokyo
  4-6-1, Shirokanedai, Minato-ku, Tokyo 108-8501, Japan
  Email: yusuzuki@ims.u-tokyo.ac.jp
  Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and Sugano
  S. Construction and characterization of a full length enriched and
  a 5' end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
  source
    1..50
    /organism "Homo sapiens"
    /db_xref "taxon:9606"
    /clone "ColF4011"
    /clone_lib "Sugano Homo sapiens cDNA Library"
  /note "Differential display comparison of untreated and
  dimethylthiourate treated 0947 cells"
  5 a 11 c 17 q 17 t

```



```

/dB_xref="taxon:9606"
/cclone="ColF5168"
/cclone_lib="Sugano Homo sapiens cDNA library"
/Note="Differential display comparison of untreated and
dimethylfumarate treated 0937 cells"

BASE COUNT      5 a      11 c      17 g      17 t
ORIGIN
Query Match      61.0%; Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%; Pred. No. 9.4e+04;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAGTCTCTCTGAGGG 20
MEDLINE      11111111 1111
COMMENT      28 GAGTCTCTCTGAGGG 44

RESULT 21
AUI064432
LOCUS      50 bp mRNA linear EST 30 AUG-2001
DEFINITION      AUI064432 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
ColF5616, mRNA sequence.

ACCESSION      AUI06432
VERSION      AUI06432.1 GI:13555953
KEYWORDS      EST.
SOURCE      human.
ORGANISM      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.

REFERENCE
AUTHORS      Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
H., et al., Isodai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
21270072
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakadawa,K., Maruyama,K., Suyama,A. and Sugano
S. Construction and characterization of a full length-enriched and
a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
Source      1..50
Location/Qualifiers
Jordanism "Homo sapiens"
/dB_xref="taxon:9606"
/cclone="ColF6266"
/cclone_lib="Sugano Homo sapiens cDNA library"
/Note="Differential display comparison of untreated and
dimethylfumarate treated 0937 cells"

BASE COUNT      5 a      11 c      17 g      17 t
ORIGIN
Query Match      61.0%; Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%; Pred. No. 9.4e+04;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAGTCTCTCTGAGGG 20
MEDLINE      11111111 1111
COMMENT      28 GAGTCTCTCTGAGGG 44

RESULT 24
AUI06445
LOCUS      50 bp mRNA linear EST 30 AUG-2001
DEFINITION      AUI06445 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
ColF6598, mRNA sequence.

ACCESSION      AUI06445
VERSION      AUI06445.1 GI:13555956
KEYWORDS      EST.
SOURCE      human.
ORGANISM      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.

REFERENCE
AUTHORS      Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J., Hata
H., et al., Isodai,T., Tanaka,T., Morishita,S., Okubo,K., Sakaki
Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)
21270072
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: ysuzuki@ims.u-tokyo.ac.jp
Suzuki,Y., Yoshitomo-Nakadawa,K., Maruyama,K., Suyama,A. and Sugano
S. Construction and characterization of a full length-enriched and
a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
Source      1..50
Location/Qualifiers
Jordanism "Homo sapiens"
/dB_xref="taxon:9606"
/cclone="ColF5616"
/cclone_lib="Sugano Homo sapiens cDNA library"
/Note="Differential display comparison of untreated and
dimethylfumarate treated 0937 cells"

BASE COUNT      5 a      11 c      17 g      17 t
ORIGIN
Query Match      61.0%; Score 12.2; DB 9; Length 50;
Best Local Similarity 82.4%; Pred. No. 9.4e+04;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 GAGTCTCTCTGAGGG 20
MEDLINE      11111111 1111
COMMENT      28 GAGTCTCTCTGAGGG 44

RESULT 22
AUI06443
LOCUS      50 bp mRNA linear EST 30 AUG-2001
DEFINITION      AUI06443 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
ColF6266, mRNA sequence.

ACCESSION      AUI06443
VERSION      AUI06443.1 GI:13555954
KEYWORDS      EST.

```



GenCore version 5.1.4\_p5\_4578  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 18, 2003, 10:49:51 ; Search time 470.82 Seconds  
(without alignments)  
1236.261 Million cell updates/sec

Title: US-09-900-115-1

Percent score: 20

Sequence: 1 qaqqcqqcatqqqqqqc 20

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 2054640 seqs, 14551402878 residues

Total number of hits satisfying chosen parameters: 841850

Minimum DB seq length: 0  
Maximum DB seq length: 50

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 1000 summaries

Database :

GenEmbl :

- 1: qb\_ba:\*
- 2: qb\_htq:\*
- 3: qb\_in:\*
- 4: qb\_em:\*
- 5: qb\_ov:\*
- 6: qb\_pat:\*
- 7: qb\_ph:\*
- 8: qb\_pl:\*
- 9: qb\_pr:\*
- 10: qb\_ro:\*
- 11: qb\_sts:\*
- 12: qb\_sy:\*
- 13: qb\_un:\*
- 14: qb\_vl:\*
- 15: em\_ba:\*
- 16: em\_fun:\*
- 17: em\_hum:\*
- 18: em\_in:\*
- 19: em\_mu:\*
- 20: em\_em:\*
- 21: em\_or:\*
- 22: em\_ov:\*
- 23: em\_pat:\*
- 24: em\_ph:\*
- 25: em\_pl:\*
- 26: em\_ro:\*
- 27: em\_sts:\*
- 28: em\_un:\*
- 29: em\_vl:\*
- 30: em\_htq\_hum:\*
- 31: em\_htq\_inv:\*
- 32: em\_htq\_other:\*
- 33: em\_htq\_mus:\*
- 34: em\_htq\_pln:\*
- 35: em\_htq\_rod:\*
- 36: em\_htq\_mam:\*
- 37: em\_htq\_vrt:\*
- 38: em\_sy:\*
- 39: em\_htqo\_hum:\*
- 40: em\_htqo\_mus:\*
- 41: em\_htqo\_other:\*

Prod. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | % Match | Query Length | ID | Description        |
|------------|-------|---------|--------------|----|--------------------|
| c 1        | 20    | 100.0   | 24           | 6  | AR034498 Sequence  |
| c 2        | 20    | 100.0   | 24           | 6  | AR048598 Sequence  |
| c 3        | 20    | 100.0   | 24           | 6  | 143402 Sequence 7  |
| c 4        | 17    | 85.0    | 21           | 6  | AR7853 Sequence 1  |
| c 5        | 17    | 85.0    | 21           | 6  | AR9820 Sequence 1  |
| c 6        | 17    | 85.0    | 21           | 6  | AR076428 Sequence  |
| c 7        | 17    | 85.0    | 21           | 6  | AR147757 Sequence  |
| c 8        | 15.2  | 76.0    | 32           | 6  | AR012838 Sequence  |
| c 9        | 15.2  | 76.0    | 32           | 6  | AR050309 Sequence  |
| c 10       | 15.2  | 76.0    | 42           | 6  | AR012833 Sequence  |
| c 11       | 15.2  | 76.0    | 42           | 6  | AR050304 Sequence  |
| c 12       | 15.2  | 76.0    | 43           | 6  | AR012834 Sequence  |
| c 13       | 15.2  | 76.0    | 43           | 6  | AR050305 Sequence  |
| c 14       | 15.2  | 76.0    | 45           | 6  | AR323471 Sequence  |
| c 15       | 15    | 75.0    | 18           | 6  | AR7859 Sequence 7  |
| c 16       | 15    | 75.0    | 18           | 6  | AR9826 Sequence 7  |
| c 17       | 14.8  | 74.0    | 26           | 6  | AR000169 Sequence  |
| c 18       | 14.8  | 74.0    | 26           | 6  | AR074609 Sequence  |
| c 19       | 14.8  | 74.0    | 26           | 6  | AR082406 Sequence  |
| c 20       | 14.8  | 74.0    | 26           | 6  | AR142099 Sequence  |
| c 21       | 14.8  | 74.0    | 26           | 6  | AR151424 Sequence  |
| c 22       | 14.8  | 74.0    | 26           | 6  | AR157417 Sequence  |
| c 23       | 14.8  | 74.0    | 26           | 6  | AR161626 Sequence  |
| c 24       | 14.8  | 74.0    | 26           | 6  | AR161627 Sequence  |
| c 25       | 14.8  | 74.0    | 26           | 6  | AR162179 Sequence  |
| c 26       | 14.8  | 74.0    | 26           | 6  | AR033901 Sequence  |
| c 27       | 14.8  | 74.0    | 26           | 6  | AX354325 Sequence  |
| c 28       | 14.8  | 74.0    | 26           | 6  | AX374668 Sequence  |
| c 29       | 14.8  | 74.0    | 26           | 6  | 123773 Sequence 9  |
| c 30       | 14.8  | 74.0    | 26           | 6  | 176189 Sequence 1  |
| c 31       | 14.8  | 74.0    | 26           | 6  | 190085 Sequence 9  |
| c 32       | 14.8  | 74.0    | 30           | 6  | AR162180 Sequence  |
| c 33       | 14.8  | 74.0    | 30           | 6  | 123774 Sequence 10 |
| c 34       | 14.8  | 74.0    | 30           | 6  | 176190 Sequence 2  |
| c 35       | 14.8  | 74.0    | 30           | 6  | 190086 Sequence 10 |
| c 36       | 14.4  | 72.0    | 21           | 6  | AX081384 Sequence  |
| c 37       | 14.4  | 72.0    | 21           | 6  | AX283214 Sequence  |
| c 38       | 14.4  | 72.0    | 21           | 6  | AX283284 Sequence  |
| c 39       | 14.2  | 71.0    | 20           | 6  | AR108704 Sequence  |
| c 40       | 14.2  | 71.0    | 25           | 6  | AR078835 Sequence  |
| c 41       | 14.2  | 71.0    | 25           | 6  | AR148147 Sequence  |
| c 42       | 14.2  | 71.0    | 40           | 6  | AX180800 Sequence  |
| c 43       | 14    | 70.0    | 15           | 6  | AR034499 Sequence  |
| c 44       | 14    | 70.0    | 15           | 6  | AR034500 Sequence  |
| c 45       | 14    | 70.0    | 15           | 6  | AR048599 Sequence  |
| c 46       | 14    | 70.0    | 15           | 6  | AR048600 Sequence  |
| c 47       | 14    | 70.0    | 15           | 6  | 143403 Sequence 8  |
| c 48       | 14    | 70.0    | 15           | 6  | 143404 Sequence 9  |
| c 49       | 14    | 70.0    | 18           | 6  | AR7858 Sequence 6  |
| c 50       | 14    | 70.0    | 18           | 6  | AR9825 Sequence 6  |
| c 51       | 13.8  | 69.0    | 22           | 6  | AX41353 Sequence   |
| c 52       | 13.8  | 69.0    | 26           | 6  | AR068436 Sequence  |
| c 53       | 13.8  | 69.0    | 32           | 6  | AR080203 Sequence  |
| c 54       | 13.6  | 68.0    | 24           | 6  | AX447467 Sequence  |
| c 55       | 13.2  | 66.0    | 32           | 6  | AR180976 Sequence  |
| c 56       | 13.2  | 66.0    | 46           | 6  | AX3213 Sequence 11 |
| c 57       | 13.2  | 66.0    | 45           | 6  | AX055492 Sequence  |
| c 58       | 13.2  | 66.0    | 50           | 6  | AX157854 Sequence  |
| c 59       | 12.8  | 64.0    | 26           | 6  | AX024150 Sequence  |
| c 60       | 12.8  | 64.0    | 27           | 6  | 143308 Sequence 12 |
| c 61       | 12.8  | 64.0    | 31           | 6  | AR3702 Sequence 24 |
| c 62       | 12.6  | 63.0    | 19           | 6  | AR181876 Sequence  |
| c 63       | 12.6  | 63.0    | 20           | 6  | AR029144 Sequence  |
| c 64       | 12.6  | 63.0    | 20           | 6  | AR036528 Sequence  |
| c 65       | 12.6  | 63.0    | 20           | 6  | AR062683 Sequence  |

|       |      |      |    |   |           |             |       |      |      |    |   |          |             |
|-------|------|------|----|---|-----------|-------------|-------|------|------|----|---|----------|-------------|
| c 66  | 12.6 | 63.0 | 20 | 6 | AR094226  | Sequence    | 139   | 12.2 | 61.0 | 38 | 6 | 176253   | Sequence 81 |
| c 67  | 12.6 | 63.0 | 20 | 6 | AR094495  | Sequence    | 140   | 12.2 | 61.0 | 39 | 6 | 158619   | Sequence 5  |
| c 68  | 12.6 | 63.0 | 20 | 6 | AR096061  | Sequence    | 141   | 12.2 | 61.0 | 39 | 6 | 164517   | Sequence 5  |
| c 69  | 12.6 | 63.0 | 20 | 6 | AR099574  | Sequence    | 142   | 12.2 | 61.0 | 41 | 6 | AR0828   | Sequence 20 |
| c 70  | 12.6 | 63.0 | 20 | 6 | AR100410  | Sequence    | 143   | 12.2 | 61.0 | 42 | 6 | 144199   | Sequence 17 |
| c 71  | 12.6 | 63.0 | 20 | 6 | AR104786  | Sequence    | 144   | 12.2 | 61.0 | 42 | 6 | 144204   | Sequence 22 |
| c 72  | 12.6 | 63.0 | 20 | 6 | AR105608  | Sequence    | c 145 | 12.2 | 61.0 | 43 | 6 | AR090801 | Sequence    |
| c 73  | 12.6 | 63.0 | 20 | 6 | AR108705  | Sequence    | c 146 | 12.2 | 61.0 | 43 | 6 | AR136520 | Sequence    |
| c 74  | 12.6 | 63.0 | 20 | 6 | AR108794  | Sequence    | c 147 | 12.2 | 61.0 | 43 | 6 | AR136520 | Sequence    |
| c 75  | 12.6 | 63.0 | 20 | 6 | AR123270  | Sequence    | c 148 | 12.2 | 61.0 | 43 | 6 | 111825   | Sequence 11 |
| c 76  | 12.6 | 63.0 | 20 | 6 | AR123342  | Sequence    | c 149 | 12.2 | 61.0 | 44 | 6 | AR027559 | Sequence    |
| c 77  | 12.6 | 63.0 | 20 | 6 | AR123343  | Sequence    | c 150 | 12.2 | 61.0 | 47 | 6 | AR159490 | Sequence    |
| c 78  | 12.6 | 63.0 | 20 | 6 | AR150055  | Sequence    | c 151 | 12.2 | 61.0 | 47 | 6 | AR195002 | Sequence    |
| c 79  | 12.6 | 63.0 | 20 | 6 | AR157078  | Sequence    | c 152 | 12.2 | 61.0 | 48 | 6 | AR142717 | Sequence    |
| c 80  | 12.6 | 63.0 | 20 | 6 | AR157081  | Sequence    | c 153 | 12.2 | 61.0 | 50 | 6 | AR125800 | Sequence    |
| c 81  | 12.6 | 63.0 | 20 | 6 | AR167445  | Sequence    | c 154 | 12.2 | 61.0 | 50 | 6 | 147212   | Sequence 14 |
| c 82  | 12.6 | 63.0 | 20 | 6 | AR178855  | Sequence    | c 155 | 12.2 | 61.0 | 17 | 6 | AR040075 | Sequence    |
| c 83  | 12.6 | 63.0 | 20 | 6 | AR205804  | Sequence    | c 156 | 12.2 | 61.0 | 23 | 6 | AR089634 | Sequence    |
| c 84  | 12.6 | 63.0 | 20 | 6 | AR205805  | Sequence    | c 157 | 12.2 | 61.0 | 29 | 6 | AR093163 | Sequence    |
| c 85  | 12.6 | 63.0 | 20 | 6 | AR212294  | Sequence    | c 158 | 12.2 | 61.0 | 29 | 6 | AR184045 | Sequence    |
| c 86  | 12.6 | 63.0 | 20 | 6 | AX090046  | Sequence    | c 159 | 12.2 | 61.0 | 29 | 6 | AX458296 | Sequence    |
| c 87  | 12.6 | 63.0 | 20 | 6 | AX104067  | Sequence    | c 160 | 12.2 | 61.0 | 30 | 6 | AR049373 | Sequence    |
| c 88  | 12.6 | 63.0 | 20 | 6 | AX355751  | Sequence    | c 161 | 12.2 | 61.0 | 31 | 6 | AR095534 | Sequence    |
| c 89  | 12.6 | 63.0 | 20 | 6 | 120685    | Sequence 83 | c 162 | 12.2 | 61.0 | 31 | 6 | AX49078  | Sequence    |
| c 90  | 12.6 | 63.0 | 20 | 6 | 156732    | Sequence 1  | c 163 | 12.2 | 61.0 | 36 | 6 | AR024287 | Sequence    |
| c 91  | 12.6 | 63.0 | 20 | 6 | 175066    | Sequence 1  | c 164 | 12.2 | 61.0 | 36 | 6 | AR045140 | Sequence    |
| c 92  | 12.6 | 63.0 | 25 | 6 | AR111928  | Sequence    | c 165 | 12.2 | 61.0 | 36 | 6 | AX009715 | Sequence    |
| c 93  | 12.6 | 63.0 | 25 | 6 | AR145273  | Sequence    | c 166 | 12.2 | 61.0 | 36 | 6 | 10011604 | Sequence    |
| c 94  | 12.6 | 63.0 | 25 | 6 | AX076722  | Sequence    | c 167 | 12.2 | 61.0 | 36 | 6 | 144834   | Sequence    |
| c 95  | 12.6 | 63.0 | 26 | 6 | AR124825  | Sequence    | c 168 | 12.2 | 61.0 | 37 | 6 | A22078   | Sequence    |
| c 96  | 12.6 | 63.0 | 27 | 6 | AR030170  | Sequence    | c 169 | 12.2 | 61.0 | 37 | 6 | A22079   | Sequence    |
| c 97  | 12.6 | 63.0 | 30 | 6 | AR125811  | Sequence    | c 170 | 12.2 | 61.0 | 37 | 6 | AX211684 | Sequence    |
| c 98  | 12.6 | 63.0 | 30 | 6 | 147223    | Sequence 15 | c 171 | 12.2 | 61.0 | 38 | 6 | AR071266 | Sequence    |
| c 99  | 12.6 | 63.0 | 30 | 9 | H0MP1TP29 | Sequence    | c 172 | 12.2 | 61.0 | 39 | 6 | A45057   | Sequence 32 |
| c 100 | 12.6 | 63.0 | 31 | 6 | AR108176  | Sequence    | c 173 | 12.2 | 61.0 | 39 | 6 | AR029673 | Sequence    |
| c 101 | 12.6 | 63.0 | 31 | 6 | AR148626  | Sequence    | c 174 | 12.2 | 61.0 | 42 | 6 | AX100501 | Sequence    |
| c 102 | 12.6 | 63.0 | 31 | 6 | AR206677  | Sequence    | c 175 | 12.2 | 61.0 | 43 | 6 | AR096933 | Sequence    |
| c 103 | 12.6 | 63.0 | 31 | 6 | H0002742  | Gene comp   | c 176 | 12.2 | 61.0 | 47 | 6 | A58501   | Sequence 5  |
| c 104 | 12.6 | 63.0 | 34 | 6 | AX468208  | Sequence    | c 177 | 12.2 | 61.0 | 50 | 6 | AX156996 | Sequence    |
| c 105 | 12.6 | 63.0 | 43 | 6 | 100832    | Sequence 4  | c 178 | 12.2 | 61.0 | 50 | 6 | AX204275 | Sequence    |
| c 106 | 12.6 | 63.0 | 43 | 6 | 100841    | Sequence 4  | c 179 | 11.8 | 59.0 | 50 | 9 | 125685   | Sequence 4  |
| c 107 | 12.6 | 63.0 | 43 | 6 | 106027    | Sequence 1  | c 180 | 11.8 | 59.0 | 15 | 6 | AX028314 | Sequence    |
| c 108 | 12.6 | 63.0 | 50 | 6 | AX199626  | Sequence    | c 181 | 11.8 | 59.0 | 17 | 6 | AR7981   | Sequence 12 |
| c 109 | 12.6 | 63.0 | 50 | 6 | AX397042  | Sequence    | c 182 | 11.8 | 59.0 | 17 | 6 | AR9948   | Sequence 12 |
| c 110 | 12.4 | 62.0 | 20 | 6 | AX148944  | Sequence    | c 183 | 11.8 | 59.0 | 17 | 6 | AR186618 | Sequence    |
| c 111 | 12.4 | 62.0 | 20 | 6 | AX148945  | Sequence    | c 184 | 11.8 | 59.0 | 18 | 6 | AX004744 | Sequence    |
| c 112 | 12.4 | 62.0 | 20 | 6 | AX148946  | Sequence    | c 185 | 11.8 | 59.0 | 19 | 6 | AR097480 | Sequence    |
| c 113 | 12.4 | 62.0 | 20 | 6 | AX148947  | Sequence    | c 186 | 11.8 | 59.0 | 19 | 6 | 125685   | Sequence 4  |
| c 114 | 12.4 | 62.0 | 40 | 6 | AX092132  | Sequence    | c 187 | 11.8 | 59.0 | 21 | 6 | AR086034 | Sequence    |
| c 115 | 12.4 | 62.0 | 40 | 6 | AX148312  | Sequence    | c 188 | 11.8 | 59.0 | 23 | 6 | AR7980   | Sequence 12 |
| c 116 | 12.4 | 62.0 | 50 | 6 | AX163994  | Sequence    | c 189 | 11.8 | 59.0 | 23 | 6 | AR9947   | Sequence 12 |
| c 117 | 12.2 | 61.0 | 17 | 6 | A4607     | Sequence 26 | c 190 | 11.8 | 59.0 | 24 | 6 | 127136   | Sequence 32 |
| c 118 | 12.2 | 61.0 | 18 | 6 | AR157079  | Sequence    | c 191 | 11.8 | 59.0 | 24 | 6 | 127121   | Sequence 17 |
| c 119 | 12.2 | 61.0 | 18 | 6 | AR211188  | Sequence    | c 192 | 11.8 | 59.0 | 25 | 6 | E38849   | Sequence 10 |
| c 120 | 12.2 | 61.0 | 18 | 6 | AX259661  | Sequence    | c 193 | 11.8 | 59.0 | 26 | 6 | A45527   | Sequence 2  |
| c 121 | 12.2 | 61.0 | 19 | 6 | AX259674  | Sequence    | c 194 | 11.8 | 59.0 | 26 | 6 | AR142749 | Sequence    |
| c 122 | 12.2 | 61.0 | 20 | 6 | AR181877  | Sequence    | c 195 | 11.8 | 59.0 | 28 | 6 | AR016579 | Sequence    |
| c 123 | 12.2 | 61.0 | 20 | 6 | AR167893  | Sequence    | c 196 | 11.8 | 59.0 | 28 | 6 | AR106416 | Sequence    |
| c 124 | 12.2 | 61.0 | 24 | 6 | AR111593  | Sequence    | c 197 | 11.8 | 59.0 | 28 | 6 | AR149064 | Sequence    |
| c 125 | 12.2 | 61.0 | 24 | 6 | AR158219  | Sequence    | c 198 | 11.8 | 59.0 | 28 | 6 | AX450231 | Sequence    |
| c 126 | 12.2 | 61.0 | 24 | 6 | 143245    | Sequence 54 | c 199 | 11.8 | 59.0 | 29 | 6 | AR151990 | Sequence    |
| c 127 | 12.2 | 61.0 | 25 | 6 | 143246    | Sequence 54 | c 200 | 11.8 | 59.0 | 29 | 6 | AR151992 | Sequence    |
| c 128 | 12.2 | 61.0 | 28 | 6 | AX062120  | Sequence    | c 201 | 11.8 | 59.0 | 30 | 6 | AR073760 | Sequence    |
| c 129 | 12.2 | 61.0 | 28 | 6 | AX062121  | Sequence    | c 202 | 11.8 | 59.0 | 33 | 6 | AX459679 | Sequence    |
| c 130 | 12.2 | 61.0 | 28 | 6 | AX064210  | Sequence    | c 203 | 11.8 | 59.0 | 34 | 6 | AX003737 | Sequence    |
| c 131 | 12.2 | 61.0 | 28 | 6 | AX064211  | Sequence    | c 204 | 11.8 | 59.0 | 34 | 6 | AX023461 | Sequence    |
| c 132 | 12.2 | 61.0 | 29 | 6 | AR007166  | Sequence 7  | c 205 | 11.8 | 59.0 | 35 | 6 | AX001437 | Sequence    |
| c 133 | 12.2 | 61.0 | 30 | 6 | AX429043  | Sequence    | c 206 | 11.8 | 59.0 | 36 | 6 | AR207936 | Sequence    |
| c 134 | 12.2 | 61.0 | 32 | 6 | AR152547  | Sequence    | c 207 | 11.8 | 59.0 | 36 | 6 | AR207936 | Sequence    |
| c 135 | 12.2 | 61.0 | 33 | 6 | AR152547  | Sequence    | c 208 | 11.8 | 59.0 | 36 | 6 | AR207936 | Sequence    |
| c 136 | 12.2 | 61.0 | 38 | 6 | AX009928  | Sequence    | c 209 | 11.8 | 59.0 | 36 | 6 | AR049103 | Sequence    |
| c 137 | 12.2 | 61.0 | 38 | 6 | AX080366  | Sequence    | c 210 | 11.8 | 59.0 | 36 | 6 | E12782   | Sequence 1  |
| c 138 | 12.2 | 61.0 | 38 | 6 | AX418234  | Sequence    | c 211 | 11.8 | 59.0 | 36 | 6 | AX114568 | Sequence    |
| c 139 | 12.2 | 61.0 | 38 | 6 | AX418234  | Sequence    | c 211 | 11.8 | 59.0 | 36 | 6 | AX482385 | Sequence    |

|       |      |      |    |   |           |                       |       |      |      |    |    |           |             |
|-------|------|------|----|---|-----------|-----------------------|-------|------|------|----|----|-----------|-------------|
| 212   | 11.6 | 58.0 | 19 | 6 | AX129907  | Sequence              | 285   | 11.6 | 58.0 | 35 | 6  | AX182277  | Sequence    |
| 213   | 11.6 | 58.0 | 19 | 6 | AX130821  | Sequence              | 286   | 11.6 | 58.0 | 35 | 6  | AX182278  | Sequence    |
| c 214 | 11.6 | 58.0 | 19 | 6 | AX182394  | Sequence              | 287   | 11.6 | 58.0 | 35 | 6  | AX182282  | Sequence    |
| c 215 | 11.6 | 58.0 | 19 | 6 | AX182395  | Sequence              | 288   | 11.6 | 58.0 | 35 | 6  | AX182283  | Sequence    |
| 216   | 11.6 | 58.0 | 20 | 6 | AX182324  | Sequence              | 289   | 11.6 | 58.0 | 35 | 6  | AX182286  | Sequence    |
| c 217 | 11.6 | 58.0 | 20 | 6 | AX182405  | Sequence              | 290   | 11.6 | 58.0 | 35 | 6  | AX182287  | Sequence    |
| c 218 | 11.6 | 58.0 | 20 | 6 | AX182406  | Sequence              | c 291 | 11.6 | 58.0 | 36 | 6  | AX1771    | Sequence 11 |
| c 219 | 11.6 | 58.0 | 20 | 6 | AX182407  | Sequence              | 292   | 11.6 | 58.0 | 36 | 6  | AX1771    | Sequence 11 |
| 220   | 11.6 | 58.0 | 20 | 6 | FA3661    | FA3661 DNA Fragment   | c 293 | 11.6 | 58.0 | 36 | 6  | AX1951251 | Sequence    |
| c 221 | 11.6 | 58.0 | 21 | 6 | AX182322  | Sequence              | c 294 | 11.6 | 58.0 | 36 | 6  | AX195576  | Sequence    |
| c 222 | 11.6 | 58.0 | 21 | 6 | AX182415  | Sequence              | c 295 | 11.6 | 58.0 | 36 | 6  | AX195576  | Sequence 25 |
| c 223 | 11.6 | 58.0 | 21 | 6 | AX182416  | Sequence              | c 296 | 11.6 | 58.0 | 37 | 6  | AX201273  | Sequence    |
| c 224 | 11.6 | 58.0 | 21 | 6 | AX182417  | Sequence              | c 297 | 11.6 | 58.0 | 37 | 6  | AX283697  | Sequence    |
| c 225 | 11.6 | 58.0 | 21 | 6 | AX182418  | Sequence              | c 298 | 11.6 | 58.0 | 39 | 6  | AX406570  | Sequence    |
| c 226 | 11.6 | 58.0 | 22 | 6 | AX122576  | Sequence              | c 299 | 11.6 | 58.0 | 39 | 6  | AX466874  | Sequence    |
| c 227 | 11.6 | 58.0 | 22 | 6 | AX182320  | Sequence              | 300   | 11.6 | 58.0 | 39 | 6  | AX463645  | Sequence    |
| c 228 | 11.6 | 58.0 | 22 | 6 | AX182424  | Sequence              | c 301 | 11.6 | 58.0 | 40 | 6  | AX463653  | Sequence    |
| c 229 | 11.6 | 58.0 | 22 | 6 | AX182425  | Sequence              | c 302 | 11.6 | 58.0 | 40 | 6  | AX201283  | Sequence    |
| c 230 | 11.6 | 58.0 | 22 | 6 | AX182426  | Sequence              | c 303 | 11.6 | 58.0 | 40 | 6  | 186248    | Sequence 2  |
| c 231 | 11.6 | 58.0 | 22 | 6 | AX182427  | Sequence              | c 304 | 11.6 | 58.0 | 44 | 6  | AR013766  | Sequence    |
| c 232 | 11.6 | 58.0 | 22 | 6 | AX182428  | Sequence              | 305   | 11.6 | 58.0 | 45 | 6  | AR013766  | Sequence    |
| c 233 | 11.6 | 58.0 | 22 | 9 | INST07411 | X86364 H. sapiens III | 306   | 11.6 | 58.0 | 45 | 6  | AR013766  | Sequence    |
| c 234 | 11.6 | 58.0 | 23 | 6 | AX128376  | Sequence              | 307   | 11.6 | 58.0 | 45 | 6  | AR209175  | Sequence    |
| c 235 | 11.6 | 58.0 | 23 | 6 | AX182318  | Sequence              | 308   | 11.6 | 58.0 | 45 | 6  | AX202637  | Sequence    |
| c 236 | 11.6 | 58.0 | 23 | 6 | AX182432  | Sequence              | 309   | 11.6 | 58.0 | 45 | 6  | 129251    | Sequence 12 |
| c 237 | 11.6 | 58.0 | 23 | 6 | AX182433  | Sequence              | 310   | 11.6 | 58.0 | 46 | 11 | AF275554  | Sequence 12 |
| c 238 | 11.6 | 58.0 | 23 | 6 | AX182434  | Sequence              | c 311 | 11.6 | 58.0 | 46 | 11 | AF275554  | Sequence 12 |
| c 239 | 11.6 | 58.0 | 23 | 6 | AX182435  | Sequence              | c 312 | 11.6 | 58.0 | 50 | 6  | AR032502  | Sequence    |
| c 240 | 11.6 | 58.0 | 24 | 6 | AX182436  | Sequence              | c 313 | 11.6 | 58.0 | 50 | 6  | AR209166  | Sequence    |
| c 241 | 11.6 | 58.0 | 24 | 6 | AX182437  | Sequence              | c 314 | 11.6 | 58.0 | 50 | 6  | AX195500  | Sequence    |
| c 242 | 11.6 | 58.0 | 24 | 6 | AR090656  | Sequence              | c 315 | 11.6 | 58.0 | 50 | 6  | 129242    | Sequence 11 |
| c 243 | 11.6 | 58.0 | 24 | 6 | AR139360  | Sequence              | 316   | 11.6 | 58.0 | 50 | 6  | 141107    | Sequence 10 |
| c 244 | 11.6 | 58.0 | 24 | 6 | AR197691  | Sequence              | c 317 | 11.6 | 58.0 | 50 | 6  | 141108    | Sequence 11 |
| c 245 | 11.6 | 58.0 | 24 | 6 | AX110688  | Sequence              | c 318 | 11.6 | 58.0 | 50 | 6  | 190916    | Sequence 11 |
| c 246 | 11.6 | 58.0 | 24 | 6 | AX182316  | Sequence              | 319   | 11.6 | 58.0 | 19 | 6  | AR186617  | Sequence    |
| c 247 | 11.6 | 58.0 | 24 | 6 | AX182440  | Sequence              | c 320 | 11.6 | 58.0 | 19 | 6  | AR052895  | Sequence    |
| c 248 | 11.6 | 58.0 | 24 | 6 | AX182441  | Sequence              | c 321 | 11.6 | 58.0 | 20 | 6  | AR118898  | Sequence    |
| c 249 | 11.6 | 58.0 | 24 | 6 | AX182442  | Sequence              | c 322 | 11.6 | 58.0 | 20 | 6  | AX148948  | Sequence    |
| c 250 | 11.6 | 58.0 | 24 | 6 | AX182443  | Sequence              | c 323 | 11.6 | 58.0 | 20 | 6  | AX297403  | Sequence    |
| c 251 | 11.6 | 58.0 | 24 | 6 | AX182444  | Sequence              | c 324 | 11.6 | 58.0 | 23 | 6  | AR089636  | Sequence    |
| c 252 | 11.6 | 58.0 | 24 | 6 | AX182445  | Sequence              | c 325 | 11.6 | 58.0 | 24 | 6  | AR069909  | Sequence    |
| c 253 | 11.6 | 58.0 | 24 | 6 | AX182446  | Sequence              | c 326 | 11.6 | 58.0 | 24 | 6  | AX292770  | Sequence    |
| c 254 | 11.6 | 58.0 | 24 | 6 | AX182447  | Sequence              | c 327 | 11.6 | 58.0 | 25 | 6  | AX099736  | Sequence    |
| c 255 | 11.6 | 58.0 | 25 | 6 | AX182448  | Sequence              | c 328 | 11.6 | 58.0 | 26 | 6  | AR118877  | Sequence    |
| c 256 | 11.6 | 58.0 | 25 | 6 | AX182449  | Sequence              | c 329 | 11.6 | 58.0 | 26 | 6  | AR184477  | Sequence    |
| c 257 | 11.6 | 58.0 | 25 | 6 | AX236640  | Sequence              | c 330 | 11.6 | 58.0 | 26 | 6  | 111019    | Sequence    |
| c 258 | 11.6 | 58.0 | 25 | 6 | AX182451  | Sequence              | c 331 | 11.6 | 58.0 | 26 | 6  | 111019    | Sequence    |
| c 259 | 11.6 | 58.0 | 25 | 6 | AX182452  | Sequence              | c 332 | 11.6 | 58.0 | 29 | 6  | AR044904  | Sequence    |
| c 260 | 11.6 | 58.0 | 25 | 6 | AX182453  | Sequence              | c 333 | 11.6 | 58.0 | 29 | 6  | 134769    | Sequence 14 |
| c 261 | 11.6 | 58.0 | 25 | 6 | AX182454  | Sequence              | c 334 | 11.6 | 58.0 | 29 | 6  | 154993    | Sequence 14 |
| c 262 | 11.6 | 58.0 | 25 | 6 | AX182455  | Sequence              | c 335 | 11.6 | 58.0 | 30 | 6  | AR036161  | Sequence    |
| c 263 | 11.6 | 58.0 | 25 | 6 | AX182456  | Sequence              | c 336 | 11.6 | 58.0 | 31 | 6  | AX248556  | Sequence    |
| c 264 | 11.6 | 58.0 | 25 | 6 | AX182457  | Sequence              | c 337 | 11.6 | 58.0 | 31 | 6  | AX248557  | Sequence    |
| c 265 | 11.6 | 58.0 | 25 | 6 | AX182458  | Sequence              | c 338 | 11.6 | 58.0 | 32 | 6  | AR008553  | Sequence    |
| c 266 | 11.6 | 58.0 | 25 | 6 | AX182459  | Sequence              | c 339 | 11.6 | 58.0 | 32 | 6  | AR008553  | Sequence    |
| c 267 | 11.6 | 58.0 | 25 | 6 | AR091106  | Sequence              | c 340 | 11.6 | 58.0 | 32 | 6  | AR008553  | Sequence    |
| c 268 | 11.6 | 58.0 | 27 | 6 | AR198141  | Sequence              | c 341 | 11.6 | 58.0 | 32 | 6  | 130123    | Sequence 46 |
| c 269 | 11.6 | 58.0 | 27 | 6 | AX182310  | Sequence              | c 342 | 11.6 | 58.0 | 42 | 6  | 129827    | Sequence 14 |
| c 270 | 11.6 | 58.0 | 28 | 6 | AX182308  | Sequence              | c 343 | 11.6 | 58.0 | 42 | 6  | 141187    | Sequence 5  |
| c 271 | 11.6 | 58.0 | 29 | 6 | AX182306  | Sequence              | c 344 | 11.6 | 58.0 | 42 | 6  | 141194    | Sequence 12 |
| c 272 | 11.6 | 58.0 | 30 | 6 | AX052926  | Sequence              | c 345 | 11.6 | 58.0 | 43 | 6  | AX003439  | Sequence    |
| c 273 | 11.6 | 58.0 | 30 | 6 | AX250307  | Sequence              | c 346 | 11.6 | 58.0 | 48 | 6  | AX221416  | Sequence    |
| c 274 | 11.6 | 58.0 | 30 | 6 | AX182304  | Sequence              | c 347 | 11.6 | 58.0 | 48 | 6  | AX426282  | Sequence    |
| c 275 | 11.6 | 58.0 | 30 | 6 | AX182303  | Sequence              | c 348 | 11.6 | 58.0 | 48 | 6  | AX426282  | Sequence    |
| c 276 | 11.6 | 58.0 | 30 | 6 | FA16182   | FA16182 Upstream re   | c 349 | 11.6 | 58.0 | 48 | 6  | AX426282  | Sequence    |
| c 277 | 11.6 | 58.0 | 31 | 6 | AX182302  | Sequence              | c 350 | 11.6 | 58.0 | 48 | 6  | AX426282  | Sequence    |
| c 278 | 11.6 | 58.0 | 32 | 6 | AX182300  | Sequence              | c 351 | 11.6 | 58.0 | 48 | 6  | AX426282  | Sequence    |
| c 279 | 11.6 | 58.0 | 33 | 6 | AR201232  | Sequence              | c 352 | 11.6 | 58.0 | 48 | 6  | AX199502  | Sequence    |
| c 280 | 11.6 | 58.0 | 33 | 6 | AX182297  | Sequence              | c 353 | 11.6 | 58.0 | 50 | 6  | AX199502  | Sequence    |
| c 281 | 11.6 | 58.0 | 34 | 6 | AX182298  | Sequence              | c 354 | 11.6 | 58.0 | 16 | 6  | AX259673  | Sequence    |
| c 282 | 11.6 | 58.0 | 34 | 6 | AX201251  | Sequence              | c 355 | 11.6 | 58.0 | 16 | 6  | AX259675  | Sequence    |
| c 283 | 11.6 | 58.0 | 34 | 6 | AX182295  | Sequence              | c 356 | 11.6 | 58.0 | 16 | 6  | AX259676  | Sequence    |
| c 284 | 11.6 | 58.0 | 34 | 6 | AX182296  | Sequence              | c 357 | 11.6 | 58.0 | 16 | 6  | AR019554  | Sequence    |
| c 285 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 358 | 11.6 | 58.0 | 18 | 6  | AR019554  | Sequence    |
| c 286 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 359 | 11.6 | 58.0 | 18 | 6  | AR109515  | Sequence    |
| c 287 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 360 | 11.6 | 58.0 | 18 | 6  | AR109515  | Sequence    |
| c 288 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 361 | 11.6 | 58.0 | 18 | 6  | AR117922  | Sequence    |
| c 289 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 362 | 11.6 | 58.0 | 18 | 6  | AR117922  | Sequence    |
| c 290 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 363 | 11.6 | 58.0 | 18 | 6  | AX202414  | Sequence    |
| c 291 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 364 | 11.6 | 58.0 | 18 | 6  | AX202414  | Sequence    |
| c 292 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 365 | 11.6 | 58.0 | 18 | 6  | AX202455  | Sequence    |
| c 293 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 366 | 11.6 | 58.0 | 18 | 6  | 15686     | Sequence 49 |
| c 294 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 367 | 11.6 | 58.0 | 18 | 6  | 17463     | Sequence 49 |
| c 295 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 368 | 11.6 | 58.0 | 20 | 6  | AR139515  | Sequence    |
| c 296 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 369 | 11.6 | 58.0 | 20 | 6  | AR139515  | Sequence    |
| c 297 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 370 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 298 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 371 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 299 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 372 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 300 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 373 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 301 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 374 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 302 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 375 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 303 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 376 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 304 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 377 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 305 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 378 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 306 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 379 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 307 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 380 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 308 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 381 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 309 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 382 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 310 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 383 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 311 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 384 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 312 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 385 | 11.6 | 58.0 | 20 | 6  | AR170368  | Sequence    |
| c 313 | 11.6 | 58.0 | 35 | 6 | AX182276  | Sequence              | c 386 | 11.6 |      |    |    |           |             |



|     |    |      |    |    |            |             |       |      |      |    |   |            |             |
|-----|----|------|----|----|------------|-------------|-------|------|------|----|---|------------|-------------|
| 504 | 11 | 55.0 | 22 | 6  | AX009038   | Sequence    | c 577 | 11   | 55.0 | 39 | 6 | AX468766   | Sequence    |
| 505 | 11 | 55.0 | 22 | 6  | AX074452   | Sequence    | c 578 | 11   | 55.0 | 39 | 6 | AX468771   | Sequence    |
| 506 | 11 | 55.0 | 24 | 6  | AR080209   | Sequence    | c 579 | 11   | 55.0 | 39 | 6 | 116904     | Sequence    |
| 507 | 11 | 55.0 | 24 | 6  | AR094559   | Sequence    | c 580 | 11   | 55.0 | 39 | 6 | 169497     | Sequence    |
| 508 | 11 | 55.0 | 24 | 6  | AX286364   | Sequence    | 581   | 11   | 55.0 | 40 | 6 | AR079796   | Sequence    |
| 509 | 11 | 55.0 | 24 | 6  | AX447454   | Sequence    | 582   | 11   | 55.0 | 40 | 6 | AR081326   | Sequence    |
| 510 | 11 | 55.0 | 24 | 6  | E62947     | Mast cell s | 583   | 11   | 55.0 | 40 | 6 | AR170686   | Sequence    |
| 511 | 11 | 55.0 | 25 | 6  | AR022311   | Sequence    | 584   | 11   | 55.0 | 40 | 6 | AX083187   | Sequence    |
| 512 | 11 | 55.0 | 25 | 6  | AX019249   | Sequence    | 585   | 11   | 55.0 | 40 | 6 | AX107060   | Sequence    |
| 513 | 11 | 55.0 | 25 | 6  | AX117328   | Sequence    | 586   | 11   | 55.0 | 40 | 6 | AX127616   | Sequence    |
| 514 | 11 | 55.0 | 26 | 6  | A37852     | Sequence    | 587   | 11   | 55.0 | 40 | 6 | AX155268   | Sequence    |
| 515 | 11 | 55.0 | 26 | 6  | A65657     | Sequence    | 588   | 11   | 55.0 | 40 | 6 | AX206864   | Sequence    |
| 516 | 11 | 55.0 | 26 | 6  | AR069890   | Sequence    | 589   | 11   | 55.0 | 40 | 6 | AX212447   | Sequence    |
| 517 | 11 | 55.0 | 26 | 6  | AR099287   | Sequence    | 590   | 11   | 55.0 | 40 | 6 | AX213290   | Sequence    |
| 518 | 11 | 55.0 | 26 | 6  | AR124171   | Sequence    | 591   | 11   | 55.0 | 40 | 6 | AX233641   | Sequence    |
| 519 | 11 | 55.0 | 27 | 6  | A28838     | DNA constr  | 592   | 11   | 55.0 | 40 | 6 | AX285306   | Sequence    |
| 520 | 11 | 55.0 | 27 | 6  | AR091539   | Sequence    | 593   | 11   | 55.0 | 40 | 6 | AX369441   | Sequence    |
| 521 | 11 | 55.0 | 27 | 6  | AR102232   | Sequence    | 594   | 11   | 55.0 | 40 | 6 | AX379603   | Sequence    |
| 522 | 11 | 55.0 | 27 | 6  | E62945     | Mast cell s | 595   | 11   | 55.0 | 40 | 6 | AX421189   | Sequence    |
| 523 | 11 | 55.0 | 27 | 6  | 185780     | Sequence    | 596   | 11   | 55.0 | 40 | 6 | AX421201   | Sequence    |
| 524 | 11 | 55.0 | 27 | 6  | 185782     | Sequence    | 597   | 11   | 55.0 | 40 | 6 | AX443025   | Sequence    |
| 525 | 11 | 55.0 | 29 | 6  | AR068882   | Sequence    | 598   | 11   | 55.0 | 40 | 6 | AX459619   | Sequence    |
| 526 | 11 | 55.0 | 29 | 6  | E07972     | Primer      | 599   | 11   | 55.0 | 40 | 6 | AX466361   | Sequence    |
| 527 | 11 | 55.0 | 30 | 6  | A65658     | Sequence    | c 600 | 11   | 55.0 | 40 | 6 | E05618     | Primer      |
| 528 | 11 | 55.0 | 30 | 6  | AR016486   | Sequence    | c 601 | 11   | 55.0 | 42 | 6 | A50272     | Sequence    |
| 529 | 11 | 55.0 | 30 | 6  | AR016491   | Sequence    | c 602 | 11   | 55.0 | 42 | 6 | AR001462   | Sequence    |
| 530 | 11 | 55.0 | 30 | 6  | AR078334   | Sequence    | c 603 | 11   | 55.0 | 42 | 6 | AR055507   | Sequence    |
| 531 | 11 | 55.0 | 30 | 6  | AR078336   | Sequence    | c 604 | 11   | 55.0 | 42 | 6 | AR085390   | Sequence    |
| 532 | 11 | 55.0 | 30 | 6  | AR121236   | Sequence    | c 605 | 11   | 55.0 | 42 | 6 | AR116992   | Sequence    |
| 533 | 11 | 55.0 | 40 | 6  | AR173054   | Sequence    | 606   | 11   | 55.0 | 42 | 6 | AX045623   | Sequence    |
| 534 | 11 | 55.0 | 40 | 6  | AR173056   | Sequence    | 607   | 11   | 55.0 | 42 | 6 | AX046499   | Sequence    |
| 535 | 11 | 55.0 | 30 | 6  | AX267025   | Sequence    | 608   | 11   | 55.0 | 42 | 6 | AX395323   | Sequence    |
| 536 | 11 | 55.0 | 30 | 6  | AX418211   | Sequence    | 609   | 11   | 55.0 | 43 | 6 | A28677     | Oligonucleo |
| 537 | 11 | 55.0 | 30 | 6  | BD011299   | Human tel   | c 610 | 11   | 55.0 | 43 | 6 | A28678     | Oligonucleo |
| 538 | 11 | 55.0 | 30 | 6  | E37048     | Human telom | 611   | 11   | 55.0 | 43 | 6 | E07971     | Primer      |
| 539 | 11 | 55.0 | 30 | 7  | PF0PRGMNT2 | Bacterioph  | c 612 | 11   | 55.0 | 44 | 6 | A28674     | dsRNA with  |
| 540 | 11 | 55.0 | 30 | 10 | MMHNF115A  | M. musculus | c 613 | 11   | 55.0 | 44 | 6 | BD000479   | Sequence    |
| 541 | 11 | 55.0 | 30 | 10 | MMHNF116A  | M. musculus | c 614 | 11   | 55.0 | 44 | 9 | HUMSPARC01 | Human osteo |
| 542 | 11 | 55.0 | 30 | 10 | MMHNF117A  | M. musculus | 615   | 11   | 55.0 | 45 | 4 | AR022057   | Canis tam   |
| 543 | 11 | 55.0 | 31 | 6  | AR016489   | Sequence    | c 616 | 11   | 55.0 | 45 | 6 | AR032679   | Sequence    |
| 544 | 11 | 55.0 | 31 | 6  | AR168787   | Sequence    | c 617 | 11   | 55.0 | 45 | 6 | AR209343   | Sequence    |
| 545 | 11 | 55.0 | 31 | 6  | AR200256   | Sequence    | c 618 | 11   | 55.0 | 45 | 6 | 129419     | Sequence    |
| 546 | 11 | 55.0 | 31 | 6  | AX249348   | Sequence    | c 619 | 11   | 55.0 | 45 | 6 | 191093     | Sequence    |
| 547 | 11 | 55.0 | 31 | 6  | 127781     | Sequence    | c 620 | 11   | 55.0 | 46 | 6 | A52096     | Sequence    |
| 548 | 11 | 55.0 | 32 | 6  | AR080841   | Sequence    | c 621 | 11   | 55.0 | 46 | 6 | AX212280   | Sequence    |
| 549 | 11 | 55.0 | 32 | 6  | AR064674   | Sequence    | c 622 | 11   | 55.0 | 46 | 6 | 105515     | Sequence    |
| 550 | 11 | 55.0 | 32 | 6  | AR080568   | Sequence    | c 623 | 11   | 55.0 | 46 | 6 | 109143     | Sequence    |
| 551 | 11 | 55.0 | 32 | 6  | AR100269   | Sequence    | c 624 | 11   | 55.0 | 47 | 6 | A28685     | Oligonucleo |
| 552 | 11 | 55.0 | 32 | 6  | 126586     | Sequence    | c 625 | 11   | 55.0 | 48 | 6 | AX164149   | Sequence    |
| 553 | 11 | 55.0 | 32 | 6  | 156807     | Sequence    | 626   | 11   | 55.0 | 48 | 6 | 182401     | Sequence    |
| 554 | 11 | 55.0 | 33 | 6  | AR064668   | Sequence    | c 627 | 11   | 55.0 | 48 | 9 | S34436     | glycoprotei |
| 555 | 11 | 55.0 | 33 | 6  | AR080562   | Sequence    | c 628 | 11   | 55.0 | 50 | 6 | A51123     | Sequence    |
| 556 | 11 | 55.0 | 33 | 6  | AX033433   | Sequence    | c 629 | 11   | 55.0 | 50 | 6 | AR032762   | Sequence    |
| 557 | 11 | 55.0 | 33 | 6  | AX033443   | Sequence    | c 630 | 11   | 55.0 | 50 | 6 | AR032961   | Sequence    |
| 558 | 11 | 55.0 | 33 | 6  | BD011022   | HIV probe   | c 631 | 11   | 55.0 | 50 | 6 | AR032962   | Sequence    |
| 559 | 11 | 55.0 | 33 | 6  | 156801     | Sequence    | 632   | 11   | 55.0 | 50 | 6 | AR194382   | Sequence    |
| 560 | 11 | 55.0 | 33 | 6  | 182403     | Sequence    | c 633 | 11   | 55.0 | 50 | 6 | AR209426   | Sequence    |
| 561 | 11 | 55.0 | 35 | 6  | AX005813   | Sequence    | c 634 | 11   | 55.0 | 50 | 6 | AR209625   | Sequence    |
| 562 | 11 | 55.0 | 35 | 6  | AX431457   | Sequence    | c 635 | 11   | 55.0 | 50 | 6 | AR209626   | Sequence    |
| 563 | 11 | 55.0 | 35 | 6  | E55297     | Novel metal | c 636 | 11   | 55.0 | 50 | 6 | AX097492   | Sequence    |
| 564 | 11 | 55.0 | 35 | 6  | 176276     | Sequence    | 637   | 11   | 55.0 | 50 | 6 | AX159730   | Sequence    |
| 565 | 11 | 55.0 | 36 | 6  | AR138459   | Sequence    | c 638 | 11   | 55.0 | 50 | 6 | AX160060   | Sequence    |
| 566 | 11 | 55.0 | 36 | 6  | AR138461   | Sequence    | c 639 | 11   | 55.0 | 50 | 6 | AX160062   | Sequence    |
| 567 | 11 | 55.0 | 36 | 6  | AR200509   | Sequence    | c 640 | 11   | 55.0 | 50 | 6 | AX162632   | Sequence    |
| 568 | 11 | 55.0 | 36 | 6  | AX088147   | Sequence    | 641   | 11   | 55.0 | 50 | 6 | AX199382   | Sequence    |
| 569 | 11 | 55.0 | 36 | 6  | AX088149   | Sequence    | c 642 | 11   | 55.0 | 50 | 6 | AX430850   | Sequence    |
| 570 | 11 | 55.0 | 36 | 6  | AX406818   | Sequence    | c 643 | 11   | 55.0 | 50 | 6 | 129502     | Sequence    |
| 571 | 11 | 55.0 | 37 | 6  | AR150960   | Sequence    | c 644 | 11   | 55.0 | 50 | 6 | 129701     | Sequence    |
| 572 | 11 | 55.0 | 37 | 6  | EL3251     | Oligonucleo | c 645 | 11   | 55.0 | 50 | 6 | 129702     | Sequence    |
| 573 | 11 | 55.0 | 37 | 9  | AB055779   | Homo sapi   | c 646 | 11   | 55.0 | 50 | 6 | 191176     | Sequence    |
| 574 | 11 | 55.0 | 38 | 6  | AB068401   | Sequence    | c 647 | 11   | 55.0 | 50 | 6 | 191375     | Sequence    |
| 575 | 11 | 55.0 | 39 | 6  | AR007970   | Sequence    | c 648 | 11   | 55.0 | 50 | 6 | 191376     | Sequence    |
| 576 | 11 | 55.0 | 39 | 6  | AX370386   | Sequence    | c 649 | 10.8 | 54.0 | 14 | 6 | AX382348   | Sequence    |





|       |      |      |    |   |          |                      |       |      |      |    |   |           |                         |
|-------|------|------|----|---|----------|----------------------|-------|------|------|----|---|-----------|-------------------------|
| c 796 | 10.8 | 54.0 | 49 | 6 | AR181389 | AR181389 Sequence    | 869   | 10.6 | 54.0 | 25 | 6 | AR176643  | AR176643 Sequence       |
| 797   | 10.8 | 54.0 | 50 | 6 | AX165884 | AX165884 Sequence    | c 870 | 10.6 | 54.0 | 25 | 6 | AX000595  | AX000595 Sequence       |
| c 798 | 10.8 | 54.0 | 51 | 6 | AX204104 | AX204104 Sequence    | c 871 | 10.6 | 54.0 | 25 | 6 | AX000613  | AX000613 Sequence       |
| c 799 | 10.8 | 54.0 | 50 | 6 | AX103593 | AX103593 Sequence    | c 872 | 10.6 | 54.0 | 25 | 6 | EL5817    | EL5817 Back primer      |
| 800   | 10.8 | 54.0 | 50 | 6 | AX128805 | AX128805 Sequence    | c 873 | 10.6 | 54.0 | 25 | 6 | 138938    | Sequence 4b             |
| 801   | 10.8 | 54.0 | 50 | 6 | AX128806 | AX128806 Sequence    | 874   | 10.6 | 54.0 | 25 | 6 | 143237    | Sequence 55             |
| 802   | 10.8 | 54.0 | 50 | 6 | R0007517 | R0007517 High-dens   | 875   | 10.6 | 54.0 | 25 | 6 | 143287    | Sequence 10             |
| 803   | 10.8 | 54.0 | 50 | 6 | R0007518 | R0007518 High-dens   | c 876 | 10.6 | 54.0 | 25 | 6 | 187969    | Sequence 4b             |
| 804   | 10.6 | 54.0 | 17 | 6 | AX022895 | AX022895 Sequence    | 877   | 10.6 | 54.0 | 25 | 6 | 187969    | Sequence 1b             |
| 805   | 10.6 | 54.0 | 17 | 6 | AX022914 | AX022914 Sequence    | 878   | 10.6 | 54.0 | 25 | 6 | 191867    | Sequence 17             |
| 806   | 10.6 | 54.0 | 17 | 6 | AX022933 | AX022933 Sequence    | 879   | 10.6 | 54.0 | 25 | 6 | 191867    | Sequence 17             |
| 807   | 10.6 | 54.0 | 17 | 6 | AX023483 | AX023483 Sequence    | 880   | 10.6 | 54.0 | 25 | 6 | 191868    | Sequence 18             |
| 808   | 10.6 | 54.0 | 17 | 6 | AX030502 | AX030502 Sequence    | 881   | 10.6 | 54.0 | 25 | 6 | 191869    | Sequence 19             |
| 809   | 10.6 | 54.0 | 17 | 6 | AX030521 | AX030521 Sequence    | 882   | 10.6 | 54.0 | 27 | 6 | AX356212  | Sequence 19             |
| 810   | 10.6 | 54.0 | 17 | 6 | AX032741 | AX032741 Sequence    | c 883 | 10.6 | 54.0 | 27 | 6 | A92697    | A92697 Sequence 10      |
| c 811 | 10.6 | 54.0 | 17 | 6 | AX284039 | AX284039 Sequence    | 884   | 10.6 | 54.0 | 27 | 6 | AR177847  | AR177847 Sequence       |
| c 812 | 10.6 | 54.0 | 17 | 6 | AX182377 | AX182377 Sequence    | c 885 | 10.6 | 54.0 | 27 | 6 | R0000820  | R0000820 Amplifier      |
| 813   | 10.6 | 54.0 | 18 | 6 | AR87891  | AR87891 Sequence 39  | c 886 | 10.6 | 54.0 | 28 | 6 | AX081619  | AX081619 Sequence       |
| 814   | 10.6 | 54.0 | 18 | 6 | AR89838  | AR89838 Sequence 39  | c 887 | 10.6 | 54.0 | 28 | 6 | AX004936  | AX004936 Sequence       |
| c 815 | 10.6 | 54.0 | 18 | 6 | AX182486 | AX182486 Sequence    | 888   | 10.6 | 54.0 | 28 | 6 | AX352087  | AX352087 Sequence       |
| c 816 | 10.6 | 54.0 | 19 | 6 | A02524   | A02524 Nucleot ide   | 889   | 10.6 | 54.0 | 28 | 6 | AX369147  | AX369147 Sequence       |
| c 817 | 10.6 | 54.0 | 19 | 6 | AX182426 | AX182426 Sequence    | c 890 | 10.6 | 54.0 | 28 | 6 | AX374800  | AX374800 Sequence       |
| c 818 | 10.6 | 54.0 | 19 | 6 | AX182496 | AX182496 Sequence    | 890   | 10.6 | 54.0 | 29 | 6 | AR012224  | AR012224 Sequence       |
| c 819 | 10.6 | 54.0 | 20 | 6 | AX23917  | AX23917 Sequence 15  | c 891 | 10.6 | 54.0 | 29 | 6 | AR068429  | AR068429 Sequence       |
| 820   | 10.6 | 54.0 | 20 | 6 | AR2351   | AR2351 Sequence 1    | c 892 | 10.6 | 54.0 | 29 | 6 | AR178391  | AR178391 Sequence       |
| c 821 | 10.6 | 54.0 | 20 | 6 | AR2353   | AR2353 Sequence 3    | 893   | 10.6 | 54.0 | 29 | 6 | 121235    | 121235 Sequence 10      |
| c 822 | 10.6 | 54.0 | 20 | 6 | AR209423 | AR209423 Sequence    | 894   | 10.6 | 54.0 | 29 | 6 | 125880    | 125880 Sequence 10      |
| c 823 | 10.6 | 54.0 | 20 | 6 | AR060624 | AR060624 Sequence    | 895   | 10.6 | 54.0 | 29 | 6 | 126273    | 126273 Sequence 10      |
| c 824 | 10.6 | 54.0 | 20 | 6 | AR076680 | AR076680 Sequence    | c 896 | 10.6 | 54.0 | 30 | 6 | A26169    | A26169 Synthetic M      |
| c 825 | 10.6 | 54.0 | 20 | 6 | AR100322 | AR100322 Sequence    | c 897 | 10.6 | 54.0 | 30 | 6 | AR022358  | AR022358 Sequence       |
| c 826 | 10.6 | 54.0 | 20 | 6 | AR149977 | AR149977 Sequence    | c 898 | 10.6 | 54.0 | 30 | 6 | AR048631  | AR048631 Sequence       |
| c 827 | 10.6 | 54.0 | 20 | 6 | AR161469 | AR161469 Sequence    | c 899 | 10.6 | 54.0 | 30 | 6 | AR054767  | AR054767 Sequence       |
| 828   | 10.6 | 54.0 | 20 | 6 | AR170718 | AR170718 Sequence    | c 900 | 10.6 | 54.0 | 30 | 6 | AR073758  | AR073758 Sequence       |
| c 829 | 10.6 | 54.0 | 20 | 6 | AR170720 | AR170720 Sequence    | c 901 | 10.6 | 54.0 | 30 | 6 | AR085150  | AR085150 Sequence       |
| c 830 | 10.6 | 54.0 | 20 | 6 | AR182737 | AR182737 Sequence    | c 902 | 10.6 | 54.0 | 30 | 6 | AR129814  | AR129814 Sequence       |
| c 831 | 10.6 | 54.0 | 20 | 6 | AX226335 | AX226335 Sequence    | c 903 | 10.6 | 54.0 | 30 | 6 | AX351092  | AX351092 Sequence       |
| c 832 | 10.6 | 54.0 | 20 | 6 | AX294683 | AX294683 Sequence    | c 904 | 10.6 | 54.0 | 30 | 6 | AX351094  | AX351094 Sequence       |
| 833   | 10.6 | 54.0 | 20 | 6 | AX382408 | AX382408 Sequence    | c 905 | 10.6 | 54.0 | 30 | 6 | 134517    | 134517 Sequence 14      |
| c 834 | 10.6 | 54.0 | 20 | 6 | B0008044 | B0008044 Method of   | c 906 | 10.6 | 54.0 | 30 | 6 | 141329    | 141329 Sequence 10      |
| c 835 | 10.6 | 54.0 | 20 | 6 | 172434   | 172434 Sequence 18   | 907   | 10.6 | 54.0 | 31 | 6 | A21298    | A21298 Nucleot ide      |
| c 836 | 10.6 | 54.0 | 20 | 6 | 172435   | 172435 Sequence 19   | c 908 | 10.6 | 54.0 | 31 | 6 | A47895    | A47895 Sequence 13      |
| c 837 | 10.6 | 54.0 | 20 | 6 | 172493   | 172493 Sequence 77   | 909   | 10.6 | 54.0 | 31 | 6 | A59340    | A59340 Sequence 2       |
| c 838 | 10.6 | 54.0 | 20 | 6 | 172494   | 172494 Sequence 78   | c 910 | 10.6 | 54.0 | 31 | 6 | AR069331  | AR069331 Sequence       |
| c 839 | 10.6 | 54.0 | 20 | 6 | 172495   | 172495 Sequence 79   | c 911 | 10.6 | 54.0 | 31 | 6 | AR073286  | AR073286 Sequence       |
| c 840 | 10.6 | 54.0 | 20 | 6 | 187149   | 187149 Sequence 77   | c 912 | 10.6 | 54.0 | 31 | 6 | AX151288  | AX151288 Sequence       |
| c 841 | 10.6 | 54.0 | 21 | 6 | AR138719 | AR138719 Sequence 45 | c 913 | 10.6 | 54.0 | 31 | 6 | AX244076  | AX244076 Sequence       |
| c 842 | 10.6 | 54.0 | 21 | 6 | AX095497 | AX095497 Sequence    | c 914 | 10.6 | 54.0 | 31 | 6 | AX244076  | AX244076 Sequence       |
| 843   | 10.6 | 54.0 | 21 | 6 | AX191314 | AX191314 Sequence    | c 915 | 10.6 | 54.0 | 31 | 6 | AX244070  | AX244070 Sequence       |
| c 844 | 10.6 | 54.0 | 21 | 6 | AX182419 | AX182419 Sequence    | 916   | 10.6 | 54.0 | 31 | 6 | AX244826  | AX244826 Sequence       |
| c 845 | 10.6 | 54.0 | 22 | 6 | AX157269 | AX157269 Sequence    | c 917 | 10.6 | 54.0 | 31 | 6 | AX2448873 | AX2448873 Sequence      |
| c 846 | 10.6 | 54.0 | 22 | 6 | AX366983 | AX366983 Sequence    | c 918 | 10.6 | 54.0 | 31 | 6 | AX249126  | AX249126 Sequence       |
| c 847 | 10.6 | 54.0 | 22 | 6 | AX382429 | AX382429 Sequence    | c 919 | 10.6 | 54.0 | 31 | 6 | AX249647  | AX249647 Sequence       |
| c 848 | 10.6 | 54.0 | 22 | 6 | 104419   | 104419 Sequence 17   | 920   | 10.6 | 54.0 | 31 | 6 | AX399640  | AX399640 Sequence       |
| c 849 | 10.6 | 54.0 | 22 | 6 | 104455   | 104455 Sequence 53   | 921   | 10.6 | 54.0 | 32 | 6 | AL7702    | AL7702 Nucleot ide      |
| c 850 | 10.6 | 54.0 | 23 | 6 | AR090291 | AR090291 Sequence    | 922   | 10.6 | 54.0 | 32 | 6 | AR3290    | AR3290 Sequence 6       |
| c 851 | 10.6 | 54.0 | 23 | 6 | AR091402 | AR091402 Sequence    | 923   | 10.6 | 54.0 | 32 | 6 | AR137039  | AR137039 Sequence       |
| c 852 | 10.6 | 54.0 | 23 | 6 | AR197326 | AR197326 Sequence    | 924   | 10.6 | 54.0 | 33 | 6 | AR037993  | AR037993 Sequence       |
| 853   | 10.6 | 54.0 | 23 | 6 | AX055504 | AX055504 Sequence    | 925   | 10.6 | 54.0 | 33 | 6 | AR054416  | AR054416 Sequence       |
| c 854 | 10.6 | 54.0 | 23 | 6 | AX110187 | AX110187 Sequence    | 926   | 10.6 | 54.0 | 33 | 6 | AR091723  | AR091723 Sequence       |
| c 855 | 10.6 | 54.0 | 23 | 6 | AX182438 | AX182438 Sequence    | 927   | 10.6 | 54.0 | 33 | 6 | AR094867  | AR094867 Sequence       |
| c 856 | 10.6 | 54.0 | 24 | 6 | AR053546 | AR053546 Sequence    | 928   | 10.6 | 54.0 | 33 | 6 | AR131294  | AR131294 Sequence       |
| c 857 | 10.6 | 54.0 | 24 | 6 | AR059369 | AR059369 Sequence    | 929   | 10.6 | 54.0 | 33 | 6 | AR184273  | AR184273 Sequence       |
| c 858 | 10.6 | 54.0 | 24 | 6 | AR065873 | AR065873 Sequence    | 930   | 10.6 | 54.0 | 33 | 6 | AX019482  | AX019482 Sequence       |
| 859   | 10.6 | 54.0 | 24 | 6 | AR071645 | AR071645 Sequence    | c 931 | 10.6 | 54.0 | 33 | 6 | AX02103   | AX02103 Sequence        |
| c 860 | 10.6 | 54.0 | 24 | 6 | AR080355 | AR080355 Sequence    | c 932 | 10.6 | 54.0 | 33 | 6 | AX0403817 | AX0403817 Sequence      |
| c 861 | 10.6 | 54.0 | 24 | 6 | AR086104 | AR086104 Sequence    | c 933 | 10.6 | 54.0 | 33 | 6 | R0011311  | R0011311 Human Telom    |
| c 862 | 10.6 | 54.0 | 24 | 6 | AR248410 | AR248410 Sequence    | c 934 | 10.6 | 54.0 | 33 | 6 | E37060    | E37060 Human Telom      |
| c 863 | 10.6 | 54.0 | 24 | 6 | AX207918 | AX207918 Sequence    | 935   | 10.6 | 54.0 | 33 | 6 | ESB806    | ESB806 Protein kit      |
| c 864 | 10.6 | 54.0 | 24 | 6 | AX207921 | AX207921 Sequence    | 936   | 10.6 | 54.0 | 33 | 6 | 123494    | 123494 Sequence 8       |
| c 865 | 10.6 | 54.0 | 24 | 6 | AX290050 | AX290050 Sequence    | 937   | 10.6 | 54.0 | 33 | 6 | 133848    | 133848 Sequence 8       |
| c 866 | 10.6 | 54.0 | 24 | 6 | AX182446 | AX182446 Sequence    | 938   | 10.6 | 54.0 | 33 | 6 | 136296    | 136296 Sequence 8       |
| 867   | 10.6 | 54.0 | 24 | 6 | 143288   | 143288 Sequence 10   | c 939 | 10.6 | 54.0 | 34 | 6 | A20246    | A20246 oligonucleotides |
| c 868 | 10.6 | 54.0 | 25 | 6 | AR086622 | AR086622 Sequence    | c 940 | 10.6 | 54.0 | 34 | 6 | AR037988  | AR037988 Sequence       |
|       |      |      |    |   |          |                      | c 941 | 10.6 | 54.0 | 34 | 6 | AR054411  | AR054411 Sequence       |

```

c 942 10.6 53.0 34 6 AR091718 Sequence
c 943 10.6 53.0 34 6 AR094862 Sequence
c 944 10.6 53.0 34 6 AR131289 Sequence
c 945 10.6 53.0 34 6 AR184268 Sequence
c 946 10.6 53.0 34 6 F58801 Protein Kln
c 947 10.6 53.0 34 6 123489 Sequence 4
c 948 10.6 53.0 34 6 130843 Sequence 4
c 949 10.6 53.0 34 6 136291 Sequence 4
c 950 10.6 53.0 34 6 143799 Sequence 18
c 951 10.6 53.0 35 6 AR199591 Sequence
c 952 10.6 53.0 35 6 AR002736 Sequence
c 953 10.6 53.0 35 6 AR085547 Sequence
c 954 10.6 53.0 35 6 AR191996 Sequence
c 955 10.6 53.0 35 6 AR439489 Sequence
c 956 10.6 53.0 35 6 AR366849 Sequence
c 957 10.6 53.0 36 6 AR056638 Sequence
c 958 10.6 53.0 36 6 AR064761 Sequence
c 959 10.6 53.0 36 6 AR095672 Sequence
c 960 10.6 53.0 36 6 AR114396 Sequence
c 961 10.6 53.0 36 6 AR039294 Sequence
c 962 10.6 53.0 36 6 AR318144 Sequence
c 963 10.6 53.0 36 6 AR318145 Sequence
c 964 10.6 53.0 36 6 AR402101 Sequence
c 965 10.6 53.0 36 6 AR034815 Sequence
c 966 10.6 53.0 36 6 130124 Sequence 46
c 967 10.6 53.0 36 9 S85472 Sequence 78
c 968 10.6 53.0 38 6 AR3542 Sequence
c 969 10.6 53.0 38 6 AR000574 Sequence
c 970 10.6 53.0 38 6 AR034315 Sequence
c 971 10.6 53.0 38 6 AR021776 Sequence
c 972 10.6 53.0 38 6 AR219179 Sequence
c 973 10.6 53.0 38 6 F17317 ReEzyme ni
c 974 10.6 53.0 39 6 AR086054 Sequence
c 975 10.6 53.0 39 6 AR128132 Sequence
c 976 10.6 53.0 39 6 AR140408 Sequence
c 977 10.6 53.0 39 6 AR146889 Sequence
c 978 10.6 53.0 40 6 AR206821 Sequence
c 979 10.6 53.0 40 6 AR206823 Sequence
c 980 10.6 53.0 40 6 AR370848 Sequence
c 981 10.6 53.0 42 6 AR18749 col immuniteo
c 982 10.6 53.0 42 6 AR045723 Sequence
c 983 10.6 53.0 42 6 AR175119 Sequence
c 984 10.6 53.0 42 6 AR214411 Sequence
c 985 10.6 53.0 42 6 AR214412 Sequence
c 986 10.6 53.0 42 6 AR320699 Sequence
c 987 10.6 53.0 42 6 AR374367 Sequence
c 988 10.6 53.0 42 6 AR481785 Sequence
c 989 10.6 53.0 42 6 112250 Sequence 19
c 990 10.6 53.0 42 6 133206 Sequence 24
c 991 10.6 53.0 42 6 158772 Sequence 19
c 992 10.6 53.0 43 6 AR033952 Sequence
c 993 10.6 53.0 43 6 AR066434 Sequence
c 994 10.6 53.0 43 6 AR175085 Sequence
c 995 10.6 53.0 43 6 AR032533 Sequence
c 996 10.6 53.0 44 6 AR5463 Sequence 4
c 997 10.6 53.0 44 6 AR160602 Sequence
c 998 10.6 53.0 44 6 AR286589 Sequence
c 999 10.6 53.0 44 6 AR474096 Sequence
1000 10.6 53.0 45 6 AR140181 Sequence

```

## ALIGNMENTS

```

RESULT 1
AR044498/c AR044498 24 bp DNA Linear PAT 29 SEP 1999
DEFINITION AR044498 Sequence 1 From patent US 5869462.
ACCESSION AR044498
VERSION AR044498.1 GI:5950103
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.

```

```

UnClassified.
REFERENCE 1 (bases 1 to 24)
AUTHORS Iwan,V.J.
TITLE Inhibition of proliferation of vascular smooth muscle cell
JOURNAL Patent: US 5869462 A 109 FEB 1999;
FEATURES Location/Qualifiers
     source          : unknown
     BASE COUNT      14 c 6 q
ORIGIN
Query Match 100.0% Score 20; 186 6; Length 24;
Best Local Similarity 100.0% Pred. No. 140003;
Matches 20; conservative 0; Mismatches 0; Gaps 0;

QY 1 GAGGGGAGGATGAGGAGGAGG 20
|||||
1b 20 GAGGGGAGGATGAGGAGGAGG 1

RESULT 2
AR044498/c AR044498 24 bp DNA Linear PAT 29 SEP 1999
DEFINITION AR044498 Sequence 1 From patent US 5821244.
ACCESSION AR044498
VERSION AR044498.1 GI:5970941
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 24)
AUTHORS Iwan,V.J.
TITLE Inhibition of proliferation of vascular smooth muscle cell
JOURNAL Patent: US 5821244 A 13 OCT 1998;
FEATURES Location/Qualifiers
     source          : unknown
     BASE COUNT      14 c 6 q
ORIGIN
Query Match 100.0% Score 20; 186 6; Length 24;
Best Local Similarity 100.0% Pred. No. 140003;
Matches 20; conservative 0; Mismatches 0; Gaps 0;

QY 1 GAGGGGAGGATGAGGAGGAGG 20
|||||
1b 20 GAGGGGAGGATGAGGAGGAGG 1

RESULT 3
AR044498/c AR044498 24 bp DNA Linear PAT 07 OCT 1997
DEFINITION AR044498 Sequence 1 From patent US 564247.
ACCESSION AR044498
VERSION AR044498.1 GI:2468646
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 24)
AUTHORS Iwan,V.J. and Kameda,Y.
TITLE Method for producing in vivo delivery of therapeutic agents via liposomes
JOURNAL Patent: US 564247 A 7 20 MAY 1997;
FEATURES Location/Qualifiers
     source          : unknown
     BASE COUNT      14 c 6 q
ORIGIN
Query Match 100.0% Score 20; 186 6; Length 24;
Best Local Similarity 100.0% Pred. No. 140003;
Matches 20; conservative 0; Mismatches 0; Gaps 0;

```

QY 1 GAGGGGGGATGGGGGA 20  
 DB 2 GAGGGGGGATGGGGGA 1

RESULT 4  
 A87853  
 LOCUS A87853 21 bp DNA linear PAT 22-JAN-2000  
 DEFINITION Sequence 1 from Patent W9934004.  
 ACCESSION A87853  
 VERSION A87853.1 GI:6746423  
 KEYWORDS  
 SOURCE unidentified.  
 ORGANISM unidentified.  
 REFERENCE 1 (bases 1 to 21)  
 AUTHORS Brysch, W.D. and Schlingensiefen, K.  
 TITLE AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD  
 JOURNAL BIONOSTIK GES (DE); BRYSCH WOLFGANG (DE)  
 FEATURES  
 SOURCE 1..21  
 /organism "unidentified"  
 /db\_xref "taxon:42644"  
 BASE COUNT 3 a 5 c 12 q 1 t  
 ORIGIN

Query Match 85.0%; Score 17; DB 6; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 2, 2e+04;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGGGGGATGGGGGA 17  
 DB 5 GAGGGGGGATGGGGGA 21

RESULT 5  
 A89820  
 LOCUS A89820 21 bp DNA linear PAT 22-JAN-2000  
 DEFINITION Sequence 1 from Patent EP0856579.  
 ACCESSION A89820  
 VERSION A89820.1 GI:6738334  
 KEYWORDS  
 SOURCE unidentified.  
 ORGANISM unidentified.  
 REFERENCE 1 (bases 1 to 21)  
 AUTHORS Brysch, W.D. and Schlingensiefen, K.D.  
 TITLE An antisense oligonucleotide preparation method  
 JOURNAL BIONOSTIK GES (DE)  
 FEATURES  
 SOURCE 1..21  
 /organism "unidentified"  
 /db\_xref "taxon:42644"  
 BASE COUNT 3 a 5 c 12 q 1 t  
 ORIGIN

Query Match 85.0%; Score 17; DB 6; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 2, 2e+04;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGGGGGATGGGGGA 17  
 DB 5 GAGGGGGGATGGGGGA 21

RESULT 6  
 A8076428  
 LOCUS A8076428 21 bp DNA linear PAT 30-AUG-2000  
 DEFINITION Sequence 1 from patent US 5958774.  
 ACCESSION A8076428

VERSION A8076428.1 GI:10003174  
 KEYWORDS  
 SOURCE unknown.  
 ORGANISM unknown.  
 REFERENCE 1 (bases 1 to 21)  
 AUTHORS Klein, A. and Latzfeld, J.  
 TITLE Method for gene transfer into cells activated from a quiescent state  
 JOURNAL Patent: US 5958774-A 1 28-SEP-1999;  
 FEATURES  
 SOURCE Location/Qualifiers  
 1..21  
 /organism="unknown"  
 BASE COUNT 3 a 5 c 12 q 1 t  
 ORIGIN

Query Match 85.0%; Score 17; DB 6; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 2, 2e+04;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGGGGGATGGGGGA 17  
 DB 5 GAGGGGGGATGGGGGA 21

RESULT 7  
 A8147757  
 LOCUS A8147757 21 bp DNA linear PAT 09-AUG-2001  
 DEFINITION Sequence 1 from patent US 6225044.  
 ACCESSION A8147757  
 VERSION A8147757.1 GI:15111847  
 KEYWORDS  
 SOURCE unknown.  
 ORGANISM unknown.  
 REFERENCE 1 (bases 1 to 21)  
 AUTHORS Klein, A. and Latzfeld, J.  
 TITLE Method for gene transfer into cells activated from a quiescent state  
 JOURNAL Patent: US 6225044-A 1 01-MAY-2001;  
 FEATURES  
 SOURCE Location/Qualifiers  
 1..21  
 /organism="unknown"  
 BASE COUNT 3 a 5 c 12 q 1 t  
 ORIGIN

Query Match 85.0%; Score 17; DB 6; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 2, 2e+04;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGGGGGATGGGGGA 17  
 DB 5 GAGGGGGGATGGGGGA 21

RESULT 8  
 A8012838  
 LOCUS A8012838 32 bp DNA linear PAT 05-DEC-1998  
 DEFINITION Sequence 19 from patent US 5763739.  
 ACCESSION A8012838  
 VERSION A8012838.1 GI:3971156  
 KEYWORDS  
 SOURCE unknown.  
 ORGANISM unknown.  
 REFERENCE 1 (bases 1 to 32)  
 AUTHORS Blackberg, L., Gustav., Edlund, M., Hansson, S., Lohmar, J., Bernell, O., Carl, E., Edward., Lundberg, L., Gustav., Stromqvist, M., Olof., and Jonnell, J., Birger, Fredrik.  
 TITLE Transgenic non-human mammals producing BSL variants  
 JOURNAL Patent: US 5763739-A 19 09-JUN-1998;  
 FEATURES  
 SOURCE Location/Qualifiers  
 1..32

```

BASE COUNT      2 a      12 c      15 g      4 t
ORIGIN

Query Match
Best Local Similarity 76.0%; Score 15.2; DB 6; Length 42;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGGGAGGATGGGGAGGC 20
DB 8 GGGGGGAGGATGGGGAGGC 27

RESULT 9
LOCUS      ARO50409      42 bp      DNA      Linear      PAT 29-SEP-1999
DEFINITION Sequence 19 from patent US 5827684.
ACCESSION  ARO50409
VERSION     ARO50409.1 GI:5974044
KEYWORDS   unknown.
SOURCE     unknown.
ORGANISM   unclassified.
REFERENCE  1 (bases 1 to 42)
AUTHORS   Blackbq,L.,Gustav., Edlund,M., Hansson,S.,Lennart.,
          Bernell,O.,Carl,Edward., Lundberg,L.,Gustav., Stromqvist,M.,Olof., and
          Tornell,J.,Birger,Fredrik.
TITLE     Nucleic acids encoding BSSL variants
JOURNAL   Patent: US 5827684-A 14-09-1998
FEATURES   Location/Qualifiers
            source
            1..42
            /organism "unknown"
BASE COUNT      4 a      18 c      16 g      4 t
ORIGIN

Query Match
Best Local Similarity 76.0%; Score 15.2; DB 6; Length 42;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGGGAGGATGGGGAGGC 20
DB 29 GGGGGGAGGATGGGGAGGC 10

RESULT 12
LOCUS      ARO12844/c      43 bp      DNA      Linear      PAT 05-DEC-1998
DEFINITION Sequence 15 from patent US 5764749.
ACCESSION  ARO12844
VERSION     ARO12844.1 GI:4971152
KEYWORDS   unknown.
SOURCE     unknown.
ORGANISM   unclassified.
REFERENCE  1 (bases 1 to 43)
AUTHORS   Blackbq,L.,Gustav., Edlund,M., Hansson,S.,Lennart.,
          Bernell,O.,Carl,Edward., Lundberg,L.,Gustav., Stromqvist,M.,Olof., and
          Tornell,J.,Birger,Fredrik.
TITLE     Transgenic non human mammals producing BSSL variants
JOURNAL   Patent: US 5764749-A 15-09-1998
FEATURES   Location/Qualifiers
            source
            1..43
            /organism "unknown"
BASE COUNT      8 a      19 c      12 g      4 t
ORIGIN

Query Match
Best Local Similarity 76.0%; Score 15.2; DB 6; Length 42;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGGGAGGATGGGGAGGC 20
DB 20 GGGGGGAGGATGGGGAGGC 1

RESULT 14
LOCUS      ARO50405/c      43 bp      DNA      Linear      PAT 29-SEP-1999
DEFINITION Sequence 15 from patent US 5827684
ACCESSION  ARO50405
VERSION     ARO50405.1 GI:5974040
KEYWORDS   unknown.
SOURCE     unknown.
ORGANISM   unclassified.

```

```

Unclassified.
REFERENCE 1 (bases 1 to 43)
AUTHORS Blackberg,L.Gustav., Edlund,M., Hansson,S.Lennart.,
Hernell,O.,Carl-Edward., Lundberg,L.Gustav., Stromqvist,M.Olof., and
Tornell,J.Birger-Fredrik.
TITLE Nucleic acids encoding BSL variants
JOURNAL Patent: US 5827683-A 15-27-OCT-1998;
FEATURES
    location/Qualifiers
        1..43
    /organism "unknown"
BASE COUNT 8 a 19 c 12 q 4 t
ORIGIN
Query Match 76.0%; Score 15.2; DB 6; Length 43;
Best Local Similarity 85.0%; Pred. No. 9.4e+04;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAGGGAGGATGGGAGG 20
DB 20 GAGGGAGGAGGAGGAGG 1

RESULT 14
AX424471
LOCUS AX424471 45 bp DNA linear PAT 07-JAN-2002
DEFINITION Sequence 19 from Patent WO0192408.
ACCESSION AX424471
VERSION AX424471.1 GI:18094240
KEYWORDS synthetic construct.
SOURCE synthetic construct.
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Paszty,C.J. and Gao,Y.
TITLE Cystine-knot polypeptides: cloaked-2 molecules and uses thereof
JOURNAL Patent: WO 0192408-A 19-06-DEC-2001;
Amgen, Inc. (US)
FEATURES
    location/Qualifiers
        1..45
    /organism "synthetic construct"
    /db_xref "taxon:32644"
    /note "Artificial: PCR primer"
BASE COUNT 9 a 19 c 8 q
ORIGIN

Query Match 76.0%; Score 15.2; DB 6; Length 45;
Best Local Similarity 85.0%; Pred. No. 9.2e+04;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAGGGAGGATGGGAGG 20
DB 41 GAGGGAGGATGGGAGG 12

RESULT 15
AM7859
LOCUS AM7859 18 bp DNA linear PAT 22-JAN-2000
DEFINITION Sequence 7 from Patent WO983904.
ACCESSION AM7859
VERSION AM7859.1 GI:6746429
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 18)
AUTHORS Brysch,W.D. and Schlingensiepen,K.
TITLE AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
JOURNAL Patent: WO 983904-A 7-06-AUG-1998;
BION-SILK GES (DE); BRYSCH WOLFWANG (DE)
FEATURES
    location/Qualifiers
        1..18
    /organism "unidentified"
    /db_xref "taxon:32644"

Unclassified.
REFERENCE 1 (bases 1 to 43)
AUTHORS Blackberg,L.Gustav., Edlund,M., Hansson,S.Lennart.,
Hernell,O.,Carl-Edward., Lundberg,L.Gustav., Stromqvist,M.Olof., and
Tornell,J.Birger-Fredrik.
TITLE Nucleic acids encoding BSL variants
JOURNAL Patent: US 5827683-A 15-27-OCT-1998;
FEATURES
    location/Qualifiers
        1..43
    /organism "unknown"
BASE COUNT 8 a 19 c 12 q 4 t
ORIGIN

Query Match 76.0%; Score 15.2; DB 6; Length 43;
Best Local Similarity 85.0%; Pred. No. 9.4e+04;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAGGGAGGATGGGAGG 20
DB 20 GAGGGAGGAGGAGGAGG 1

RESULT 14
AX424471
LOCUS AX424471 45 bp DNA linear PAT 07-JAN-2002
DEFINITION Sequence 19 from Patent WO0192408.
ACCESSION AX424471
VERSION AX424471.1 GI:18094240
KEYWORDS synthetic construct.
SOURCE synthetic construct.
ORGANISM artificial sequences.
REFERENCE 1
AUTHORS Paszty,C.J. and Gao,Y.
TITLE Cystine-knot polypeptides: cloaked-2 molecules and uses thereof
JOURNAL Patent: WO 0192408-A 19-06-DEC-2001;
Amgen, Inc. (US)
FEATURES
    location/Qualifiers
        1..45
    /organism "synthetic construct"
    /db_xref "taxon:32644"
    /note "Artificial: PCR primer"
BASE COUNT 9 a 19 c 8 q
ORIGIN

Query Match 76.0%; Score 15; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.5e+05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGGAGGATGGGAGG 15
DB 4 GAGGGAGGATGGGAGG 18

RESULT 16
AM9826
LOCUS AM9826 18 bp DNA linear PAT 22-JAN-2000
DEFINITION Sequence 7 from Patent EP0856579.
ACCESSION AM9826
VERSION AM9826.1 GI:6748340
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 18)
AUTHORS Brysch,W.D. and Schlingensiepen,K.D.
TITLE An antisense oligonucleotide preparation method
JOURNAL Patent: EP 0856579-A 7-05-AUG-1998;
BION-SILK GES (DE)
FEATURES
    location/Qualifiers
        1..18
    /organism "unidentified"
    /db_xref "taxon:32644"
    /note "Artificial: PCR primer"
BASE COUNT 2 a 4 c 11 q 1 t
ORIGIN

Query Match 75.0%; Score 15; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.5e+05;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGGAGGATGGGAGG 15
DB 4 GAGGGAGGATGGGAGG 18

RESULT 17
AM98169/c
LOCUS AM98169/c 26 bp DNA linear PAT 04-DEC-1998
DEFINITION Sequence 3 from patent US 5746333.
ACCESSION AM98169
VERSION AM98169.1 GI:3962700
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Livaak,K.J. and McBridge,L.J.
TITLE Passive internal references for the detection of nucleic acid
amplification products
JOURNAL Patent: US 5746333-A 3-07-APR-1998;
FEATURES
    location/Qualifiers
        1..26
    /organism "unknown"
BASE COUNT 3 a 14 c 4 q 6 t
ORIGIN

Query Match 74.0%; Score 14.8; DB 6; Length 26;
Best Local Similarity 88.9%; Pred. No. 1.6e+05;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGAGGATGGGAGG 19
DB 22 AGGAGGATGGGAGG 5

```

```

RESULT 18
LOCUS      AR074609          26 bp      DNA      Linear      PAT 28 AUG 2000
DEFINITION Sequence 6 from patient US 5955268.
ACCESSION  AR074609
VERSION     AR074609.1  GI:10001462
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 26)
AUTHORS   Granados,E.N., Bonina,S.R., Carrino,J.J., and Solomon,N.A.
TITLE     Method and reagent for detecting multiple nucleic acid sequences in
a test sample
JOURNAL   .
FEATURES   Location/Qualifiers
             source          1..26
             /organism="unknown"
BASE COUNT  3 a 13 c 4 q 6 t
QUERY Match 74.0%; Score 14.8; DB 6; Length 26;
Best Local Similarity 88.9%; Pred. No. 1,6e+05;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGGAGATGGGGAGG 19
Db 22 AGGATGGATGGGGAGG 5

RESULT 19
LOCUS      AR082406          26 bp      DNA      Linear      PAT 31 AUG 2000
DEFINITION Sequence 3 from patient US 5972716.
ACCESSION  AR082406
VERSION     AR082406.1  GI:10009142
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 26)
AUTHORS   Ramsd,J.R.P., Wondolera,L.M., and Marmaro,J.M.
TITLE     Fluorescence monitoring device with textured optical tube and
method for reducing background fluorescence
JOURNAL   Patient : US 5972716 A 3 26 OCT 1999;
FEATURES   Location/Qualifiers
             source          1..26
             /organism="unknown"
BASE COUNT  3 a 13 c 4 q 6 t
QUERY Match 74.0%; Score 14.8; DB 6; Length 26;
Best Local Similarity 88.9%; Pred. No. 1,6e+05;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGGAGATGGGGAGG 19
Db 22 AGGATGGATGGGGAGG 5

RESULT 20
LOCUS      AR142099          26 bp      DNA      Linear      PAT 08 AUG 2001
DEFINITION Sequence 20 from patient US 6174670.
ACCESSION  AR142099
VERSION     AR142099.1  GI:15102499
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 26)
AUTHORS   Wittwer,C.T., Ririe,K.M., and Rasmussen,R.P.
TITLE     Monitoring amplification of DNA during PCR

```

```

JOURNAL   Patient : US 6124670 A 20 16 JAN 2001;
FEATURES   Location/Qualifiers
             source          1..26
             /organism="unknown"
BASE COUNT  3 a 13 c 4 q 6 t
ORGANISM   .
QUERY Match 74.0%; Score 14.8; DB 6; Length 26;
Best Local Similarity 88.9%; Pred. No. 1,6e+05;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGGAGATGGGGAGG 19
Db 22 AGGATGGATGGGGAGG 5

RESULT 21
LOCUS      AR151424          26 bp      DNA      Linear      PAT 08 AUG 2001
DEFINITION Sequence 20 from patient US 6252079.
ACCESSION  AR151424
VERSION     AR151424.1  GI:15117474
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 26)
AUTHORS   Wittwer,C.T., Ririe,K.M., and Rasmussen,R.P.
TITLE     PCR method for nucleic acid quantification utilizing second or
third order rate constants
JOURNAL   Patient : US 6252079 A 20 15 MAY 2001;
FEATURES   Location/Qualifiers
             source          1..26
             /organism="unknown"
BASE COUNT  3 a 13 c 4 q 6 t
QUERY Match 74.0%; Score 14.8; DB 6; Length 26;
Best Local Similarity 88.9%; Pred. No. 1,6e+05;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGGAGATGGGGAGG 19
Db 22 AGGATGGATGGGGAGG 5

RESULT 22
LOCUS      AR157417          26 bp      DNA      Linear      PAT 17 OCT 2001
DEFINITION Sequence 20 from patient US 6245514.
ACCESSION  AR157417
VERSION     AR157417.1  GI:16218455
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
REFERENCE  1 (bases 1 to 26)
AUTHORS   Wittwer,C.T.
TITLE     Fluorescent donor-acceptor pair with low spectral overlap
JOURNAL   Patient : US 6245514 A 20 12 JUN 2001;
FEATURES   Location/Qualifiers
             source          1..26
             /organism="unknown"
BASE COUNT  3 a 13 c 4 q 6 t
ORGANISM   .
QUERY Match 74.0%; Score 14.8; DB 6; Length 26;
Best Local Similarity 88.9%; Pred. No. 1,6e+05;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGGAGATGGGGAGG 19
Db 22 AGGATGGATGGGGAGG 5

```

AUTHORS Livak, K.J., Flood, S.J.A., Mamoro, J., and Mullah, K. Bishar.  
 TITLE Hybridization assay using self-quenching fluorescence probe  
 JOURNAL Patent: US 6,254,569-A 9 10-JUL-2001;  
 FEATURES Location/Qualifiers  
 SOURCE 1..26  
 BASE COUNT 3 a 13 c 4 q 6 t  
 ORIGIN /organism="unknown"  
 QUERY Match 74.0%; Score 14.8; DB 6; Length 26;  
 Best Local Similarity 88.9%; Pred. No. 1.6e+05;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2 AGGATGGATAGGGGGAGG 19  
 DB 22 AGGATGGATAGGGGGAGG 5

Search completed: March 18, 2003, 11:26:03  
 Job time : 492.154 secs

RESULT 24  
 LOCUS AR161626 26 bp DNA Linear PAT 17-OCT-2001  
 DEFINITION Sequence 4 from patent US 6,254,476.  
 ACCESSION AR161626  
 VERSION AR161626.1 GI:16227601  
 KEYWORDS  
 SOURCE unknown.  
 ORGANISM unknown.  
 REFERENCE 1 (bases 1 to 26)  
 AUTHORS Vinayak, R.S., Lee, L.G., Mullah, K.B. and Rosenblum, B.H.  
 TITLE Methods and compositions for synthesis of labelled oligonucleotides and analogs on solid-supports  
 JOURNAL Patent: US 6,254,476-A 4 03-JUL-2001;  
 FEATURES Location/Qualifiers  
 SOURCE 1..26  
 BASE COUNT 3 a 13 c 4 q 6 t  
 ORIGIN /organism="unknown"

QUERY Match 74.0%; Score 14.8; DB 6; Length 26;  
 Best Local Similarity 88.9%; Pred. No. 1.6e+05;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2 AGGATGGATAGGGGGAGG 19  
 DB 22 AGGATGGATAGGGGGAGG 5

RESULT 21  
 LOCUS AR161627 26 bp DNA Linear PAT 17-OCT-2001  
 DEFINITION Sequence 5 from patent US 6,254,476.  
 ACCESSION AR161627  
 VERSION AR161627.1 GI:16227603  
 KEYWORDS  
 SOURCE unknown.  
 ORGANISM unknown.  
 REFERENCE 1 (bases 1 to 26)  
 AUTHORS Vinayak, R.S., Lee, L.G., Mullah, K.B. and Rosenblum, B.H.  
 TITLE Methods and compositions for synthesis of labelled oligonucleotides and analogs on solid-supports  
 JOURNAL Patent: US 6,254,476-A 5 03-JUL-2001;  
 FEATURES Location/Qualifiers  
 SOURCE 1..26  
 BASE COUNT 3 a 13 c 4 q 6 t  
 ORIGIN /organism="unknown"

QUERY Match 74.0%; Score 14.8; DB 6; Length 26;  
 Best Local Similarity 88.9%; Pred. No. 1.6e+05;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2 AGGATGGATAGGGGGAGG 19  
 DB 22 AGGATGGATAGGGGGAGG 5

RESULT 25  
 LOCUS AR162179 26 bp DNA Linear PAT 17-OCT-2001  
 DEFINITION Sequence 9 from patent US 6,254,569.  
 ACCESSION AR162179  
 VERSION AR162179.1 GI:16229271  
 KEYWORDS  
 SOURCE unknown.  
 ORGANISM unknown.  
 REFERENCE 1 (bases 1 to 26)





GenCore version 5.1.4.p5.4578  
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 18, 2003, 10:48:56 : Search time 110.82 seconds  
(without alignments)  
406.426 Million cell updates/sec

Title: US-09-900-115-1

Perfect score: 20

Sequence: 1 qaaqacqacatgaaqgaqc 20

Scoring table: IDENTITY\_NUC

Gapop 10.0 : Gapext 1.0

Searched: 2185239 seqs, 112599159 residues

Total number of hits satisfying chosen parameters: 2166140

Minimum DB seq length: 0

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

N\_Geneseq\_101002:\*

|     |  |
|-----|--|
| 1:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1980.DAT:*  |
| 2:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1981.DAT:*  |
| 3:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1982.DAT:*  |
| 4:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1983.DAT:*  |
| 5:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1984.DAT:*  |
| 6:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1985.DAT:*  |
| 7:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1986.DAT:*  |
| 8:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1987.DAT:*  |
| 9:  | /SID52/qcqdta/geneseq/geneseq-emb1/NA1988.DAT:*  |
| 10: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1989.DAT:*  |
| 11: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1990.DAT:*  |
| 12: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1991.DAT:*  |
| 13: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1992.DAT:*  |
| 14: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1993.DAT:*  |
| 15: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1994.DAT:*  |
| 16: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1995.DAT:*  |
| 17: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1996.DAT:*  |
| 18: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1997.DAT:*  |
| 19: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1998.DAT:*  |
| 20: | /SID52/qcqdta/geneseq/geneseq-emb1/NA1999.DAT:*  |
| 21: | /SID52/qcqdta/geneseq/geneseq-emb1/NA2000.DAT:*  |
| 22: | /SID52/qcqdta/geneseq/geneseq-emb1/NA2001A.DAT:* |
| 23: | /SID52/qcqdta/geneseq/geneseq-emb1/NA2001B.DAT:* |
| 24: | /SID52/qcqdta/geneseq/geneseq-emb1/NA2002.DAT:*  |

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| Result | No.  | Score | Query Match % | Length | ID        | Description        |
|--------|------|-------|---------------|--------|-----------|--------------------|
| 1      | 20   | 100.0 | 20            | 24     | AA033449  | TGF-beta1 antisens |
| 2      | 20   | 100.0 | 24            | 16     | AA0105419 | Human TGF-beta1 MR |
| 3      | 20   | 100.0 | 24            | 16     | AA075041  | Human TGF-beta(1)  |
| 4      | 18   | 90.0  | 18            | 16     | AA081261  | Ribozyme target se |
| 5      | 17   | 85.0  | 21            | 19     | AA048412  | Transforming growt |
| 6      | 15.2 | 76.0  | 45            | 24     | ABA94307  | Mouse cloaked-2 cd |
| 7      | 15   | 75.0  | 18            | 19     | AA048418  | Transforming growt |
| 8      | 14.8 | 74.0  | 23            | 24     | AA014716  | Nucleic acid probe |
| 9      | 14.8 | 74.0  | 25            | 22     | AA023619  | Tadman probe. Uni  |

|    |      |      |    |    |          |                    |
|----|------|------|----|----|----------|--------------------|
| 10 | 14.8 | 74.0 | 25 | 22 | AA023640 | CAP probe. Uniden  |
| 11 | 14.8 | 74.0 | 25 | 24 | ABK14714 | Dual labeled probe |
| 12 | 14.8 | 74.0 | 26 | 16 | AAT06020 | Fluorescently labe |
| 13 | 14.8 | 74.0 | 26 | 17 | AAT43558 | Fluorescein-labell |
| 14 | 14.8 | 74.0 | 26 | 18 | AAT32422 | Probe Al. Synthet  |
| 15 | 14.8 | 74.0 | 26 | 18 | AA093058 | Capture probe 1 to |
| 16 | 14.8 | 74.0 | 26 | 19 | AAV16266 | Dual labeled fluor |
| 17 | 14.8 | 74.0 | 26 | 19 | AAV15328 | Human actin probe  |
| 18 | 14.8 | 74.0 | 26 | 21 | AA090480 | Labelled SSI oligo |
| 19 | 14.8 | 74.0 | 26 | 22 | AA011184 | Human beta-actin   |
| 20 | 14.8 | 74.0 | 26 | 22 | AA045993 | Human beta-actin   |
| 21 | 14.8 | 74.0 | 26 | 22 | AA059150 | Dual-labeled fluor |
| 22 | 14.8 | 74.0 | 26 | 24 | AA039852 | Allergic disease e |
| 23 | 14.8 | 74.0 | 26 | 24 | AA047243 | Allergic disease e |
| 24 | 14.8 | 74.0 | 26 | 24 | AA052496 | Fluorescent probe  |
| 25 | 14.8 | 74.0 | 26 | 24 | AA059047 | Nucleotide sequen  |
| 26 | 14.8 | 74.0 | 26 | 24 | AA099902 | Human allergic dis |
| 27 | 14.8 | 74.0 | 26 | 24 | AA049643 | Human beta actin   |
| 28 | 14.8 | 74.0 | 26 | 24 | AA049781 | Human beta actin r |
| 29 | 14.8 | 74.0 | 26 | 24 | AA049723 | INA probe used to  |
| 30 | 14.8 | 74.0 | 30 | 17 | AAT32423 | Complement target  |
| 31 | 14.4 | 72.0 | 16 | 19 | AA047250 | Antisense oligonuc |
| 32 | 14.4 | 72.0 | 16 | 20 | AA053627 | Human adenosine A1 |
| 33 | 14.4 | 72.0 | 16 | 21 | AA019192 | Human adenosine A1 |
| 34 | 14.4 | 72.0 | 16 | 21 | AA033070 | Low adenosine anti |
| 35 | 14.4 | 72.0 | 16 | 21 | AA034229 | Human adenosine A1 |
| 36 | 14.4 | 72.0 | 17 | 19 | AA047249 | Antisense oligonuc |
| 37 | 14.4 | 72.0 | 17 | 19 | AA047229 | Antisense oligonuc |
| 38 | 14.4 | 72.0 | 17 | 20 | AA053626 | Human adenosine A1 |
| 39 | 14.4 | 72.0 | 17 | 20 | AA053606 | Human adenosine A1 |
| 40 | 14.4 | 72.0 | 17 | 21 | AA019171 | Human adenosine A1 |
| 41 | 14.4 | 72.0 | 17 | 21 | AA019191 | Human adenosine A1 |
| 42 | 14.4 | 72.0 | 17 | 21 | AA033049 | Low adenosine anti |
| 43 | 14.4 | 72.0 | 17 | 21 | AA033069 | Human adenosine A1 |
| 44 | 14.4 | 72.0 | 17 | 21 | AA034008 | Human adenosine A1 |
| 45 | 14.4 | 72.0 | 17 | 21 | AA047228 | Human adenosine A1 |
| 46 | 14.4 | 72.0 | 18 | 19 | AA047228 | Antisense oligonuc |
| 47 | 14.4 | 72.0 | 18 | 19 | AA047207 | Antisense oligonuc |
| 48 | 14.4 | 72.0 | 18 | 20 | AA053625 | Human adenosine A1 |
| 49 | 14.4 | 72.0 | 18 | 20 | AA053584 | Human adenosine A1 |
| 50 | 14.4 | 72.0 | 18 | 20 | AA053605 | Human adenosine A1 |
| 51 | 14.4 | 72.0 | 18 | 21 | AA019149 | Human adenosine A1 |
| 52 | 14.4 | 72.0 | 18 | 21 | AA019170 | Human adenosine A1 |
| 53 | 14.4 | 72.0 | 18 | 21 | AA019190 | Human adenosine A1 |
| 54 | 14.4 | 72.0 | 18 | 21 | AA033027 | Low adenosine anti |
| 55 | 14.4 | 72.0 | 18 | 21 | AA033048 | Low adenosine anti |
| 56 | 14.4 | 72.0 | 18 | 21 | AA033068 | Human adenosine A1 |
| 57 | 14.4 | 72.0 | 18 | 21 | AA033386 | Human adenosine A1 |
| 58 | 14.4 | 72.0 | 18 | 21 | AA043497 | Human adenosine A1 |
| 59 | 14.4 | 72.0 | 18 | 21 | AA043427 | Human adenosine A1 |
| 60 | 14.4 | 72.0 | 19 | 19 | AA047247 | Antisense oligonuc |
| 61 | 14.4 | 72.0 | 19 | 19 | AA047248 | Antisense oligonuc |
| 62 | 14.4 | 72.0 | 19 | 19 | AA047227 | Antisense oligonuc |
| 63 | 14.4 | 72.0 | 19 | 19 | AA047206 | Antisense oligonuc |
| 64 | 14.4 | 72.0 | 19 | 19 | AA047184 | Antisense oligonuc |
| 65 | 14.4 | 72.0 | 19 | 20 | AA053624 | Human adenosine A1 |
| 66 | 14.4 | 72.0 | 19 | 20 | AA053561 | Human adenosine A1 |
| 67 | 14.4 | 72.0 | 19 | 20 | AA053583 | Human adenosine A1 |
| 68 | 14.4 | 72.0 | 19 | 20 | AA053604 | Human adenosine A1 |
| 69 | 14.4 | 72.0 | 19 | 21 | AA019126 | Human adenosine A1 |
| 70 | 14.4 | 72.0 | 19 | 21 | AA019148 | Human adenosine A1 |
| 71 | 14.4 | 72.0 | 19 | 21 | AA019169 | Human adenosine A1 |
| 72 | 14.4 | 72.0 | 19 | 21 | AA019189 | Human adenosine A1 |
| 73 | 14.4 | 72.0 | 19 | 21 | AA033004 | Low adenosine anti |
| 74 | 14.4 | 72.0 | 19 | 21 | AA033026 | Low adenosine anti |
| 75 | 14.4 | 72.0 | 19 | 21 | AA033047 | Low adenosine anti |
| 76 | 14.4 | 72.0 | 19 | 21 | AA033067 | Human adenosine A1 |
| 77 | 14.4 | 72.0 | 19 | 21 | AA033363 | Human adenosine A1 |
| 78 | 14.4 | 72.0 | 19 | 21 | AA033385 | Human adenosine A1 |
| 79 | 14.4 | 72.0 | 19 | 21 | AA033406 | Human adenosine A1 |
| 80 | 14.4 | 72.0 | 19 | 21 | AA033426 | Human adenosine A1 |
| 81 | 14.4 | 72.0 | 20 | 19 | AA047246 | Antisense oligonuc |
| 82 | 14.4 | 72.0 | 20 | 19 | AA047226 | Antisense oligonuc |

|     |      |      |    |    |          |                     |     |      |      |    |    |          |                     |
|-----|------|------|----|----|----------|---------------------|-----|------|------|----|----|----------|---------------------|
| 83  | 14.4 | 72.0 | 20 | 19 | AAV47205 | Ant isense of ligan | 156 | 14.4 | 72.0 | 22 | 19 | AAV47109 | Ant isense of ligan |
| 84  | 14.4 | 72.0 | 20 | 19 | AAV47183 | Ant isense of ligan | 157 | 14.4 | 72.0 | 22 | 20 | AAV53535 | Human adenosine A1  |
| 85  | 14.4 | 72.0 | 20 | 19 | AAV47160 | Ant isense of ligan | 158 | 14.4 | 72.0 | 22 | 20 | AAV53511 | Human adenosine A1  |
| 86  | 14.4 | 72.0 | 20 | 20 | AAV53537 | Human adenosine A1  | 159 | 14.4 | 72.0 | 22 | 20 | AAV53558 | Human adenosine A1  |
| 87  | 14.4 | 72.0 | 20 | 20 | AAV53623 | Human adenosine A1  | 160 | 14.4 | 72.0 | 22 | 20 | AAV53621 | Human adenosine A1  |
| 88  | 14.4 | 72.0 | 20 | 20 | AAV53560 | Human adenosine A1  | 161 | 14.4 | 72.0 | 22 | 20 | AAV53486 | Human adenosine A1  |
| 89  | 14.4 | 72.0 | 20 | 20 | AAV53582 | Human adenosine A1  | 162 | 14.4 | 72.0 | 22 | 20 | AAV53580 | Human adenosine A1  |
| 90  | 14.4 | 72.0 | 20 | 20 | AAV53603 | Human adenosine A1  | 163 | 14.4 | 72.0 | 22 | 20 | AAV53601 | Human adenosine A1  |
| 91  | 14.4 | 72.0 | 20 | 21 | AAV19102 | Human adenosine A1  | 164 | 14.4 | 72.0 | 22 | 21 | AAV19051 | Human adenosine A1  |
| 92  | 14.4 | 72.0 | 20 | 21 | AAV19125 | Human adenosine A1  | 165 | 14.4 | 72.0 | 22 | 21 | AAV19076 | Human adenosine A1  |
| 93  | 14.4 | 72.0 | 20 | 21 | AAV19147 | Human adenosine A1  | 166 | 14.4 | 72.0 | 22 | 21 | AAV19100 | Human adenosine A1  |
| 94  | 14.4 | 72.0 | 20 | 21 | AAV19168 | Human adenosine A1  | 167 | 14.4 | 72.0 | 22 | 21 | AAV19123 | Human adenosine A1  |
| 95  | 14.4 | 72.0 | 20 | 21 | AAV19188 | Human adenosine A1  | 168 | 14.4 | 72.0 | 22 | 21 | AAV19145 | Human adenosine A1  |
| 96  | 14.4 | 72.0 | 20 | 21 | AAV32980 | Low adenosine anti  | 169 | 14.4 | 72.0 | 22 | 21 | AAV19166 | Human adenosine A1  |
| 97  | 14.4 | 72.0 | 20 | 21 | AAV33003 | Low adenosine anti  | 170 | 14.4 | 72.0 | 22 | 21 | AAV19186 | Human adenosine A1  |
| 98  | 14.4 | 72.0 | 20 | 21 | AAV33025 | Low adenosine anti  | 171 | 14.4 | 72.0 | 22 | 21 | AAV32929 | Low adenosine anti  |
| 99  | 14.4 | 72.0 | 20 | 21 | AAV33036 | Low adenosine anti  | 172 | 14.4 | 72.0 | 22 | 21 | AAV32954 | Low adenosine anti  |
| 100 | 14.4 | 72.0 | 20 | 21 | AAV33066 | Low adenosine anti  | 173 | 14.4 | 72.0 | 22 | 21 | AAV32978 | Low adenosine anti  |
| 101 | 14.4 | 72.0 | 20 | 21 | AAV33089 | Human adenosine A1  | 174 | 14.4 | 72.0 | 22 | 21 | AAV33001 | Low adenosine anti  |
| 102 | 14.4 | 72.0 | 20 | 21 | AAV33062 | Human adenosine A1  | 175 | 14.4 | 72.0 | 22 | 21 | AAV33023 | Low adenosine anti  |
| 103 | 14.4 | 72.0 | 20 | 21 | AAV33084 | Human adenosine A1  | 176 | 14.4 | 72.0 | 22 | 21 | AAV33044 | Low adenosine anti  |
| 104 | 14.4 | 72.0 | 20 | 21 | AAV33005 | Human adenosine A1  | 177 | 14.4 | 72.0 | 22 | 21 | AAV33064 | Low adenosine anti  |
| 105 | 14.4 | 72.0 | 20 | 21 | AAV33025 | Human adenosine A1  | 178 | 14.4 | 72.0 | 22 | 21 | AAV33088 | Human adenosine A1  |
| 106 | 14.4 | 72.0 | 21 | 18 | AAV60741 | Adenosine A1 recep  | 179 | 14.4 | 72.0 | 22 | 21 | AAV33113 | Human adenosine A1  |
| 107 | 14.4 | 72.0 | 21 | 18 | AAV47232 | Adenosine A1 recep  | 180 | 14.4 | 72.0 | 22 | 21 | AAV33137 | Human adenosine A1  |
| 108 | 14.4 | 72.0 | 21 | 19 | AAV47245 | Ant isense of ligan | 181 | 14.4 | 72.0 | 22 | 21 | AAV33060 | Human adenosine A1  |
| 109 | 14.4 | 72.0 | 21 | 19 | AAV47225 | Ant isense of ligan | 182 | 14.4 | 72.0 | 22 | 21 | AAV33082 | Human adenosine A1  |
| 110 | 14.4 | 72.0 | 21 | 19 | AAV47204 | Ant isense of ligan | 183 | 14.4 | 72.0 | 22 | 21 | AAV33003 | Human adenosine A1  |
| 111 | 14.4 | 72.0 | 21 | 19 | AAV47182 | Ant isense of ligan | 184 | 14.4 | 72.0 | 22 | 21 | AAV33024 | Human adenosine A1  |
| 112 | 14.4 | 72.0 | 21 | 19 | AAV47159 | Ant isense of ligan | 185 | 14.4 | 72.0 | 22 | 21 | AAV33043 | Human adenosine A1  |
| 113 | 14.4 | 72.0 | 21 | 19 | AAV47135 | Ant isense of ligan | 186 | 14.4 | 72.0 | 22 | 21 | AAV47082 | Ant isense of ligan |
| 114 | 14.4 | 72.0 | 21 | 19 | AAV52869 | Adenosine A1 recep  | 187 | 14.4 | 72.0 | 22 | 19 | AAV47243 | Ant isense of ligan |
| 115 | 14.4 | 72.0 | 21 | 20 | AAV53536 | Human adenosine A1  | 188 | 14.4 | 72.0 | 22 | 19 | AAV47202 | Ant isense of ligan |
| 116 | 14.4 | 72.0 | 21 | 20 | AAV53512 | Human adenosine A1  | 189 | 14.4 | 72.0 | 22 | 19 | AAV47180 | Ant isense of ligan |
| 117 | 14.4 | 72.0 | 21 | 20 | AAV53622 | Human adenosine A1  | 190 | 14.4 | 72.0 | 22 | 19 | AAV47157 | Ant isense of ligan |
| 118 | 14.4 | 72.0 | 21 | 20 | AAV53559 | Human adenosine A1  | 191 | 14.4 | 72.0 | 22 | 19 | AAV47133 | Ant isense of ligan |
| 119 | 14.4 | 72.0 | 21 | 20 | AAV53581 | Human adenosine A1  | 192 | 14.4 | 72.0 | 22 | 19 | AAV47108 | Ant isense of ligan |
| 120 | 14.4 | 72.0 | 21 | 20 | AAV53602 | Human adenosine A1  | 193 | 14.4 | 72.0 | 22 | 20 | AAV53534 | Human adenosine A1  |
| 121 | 14.4 | 72.0 | 21 | 21 | AAV18434 | Human adenosine A1  | 194 | 14.4 | 72.0 | 22 | 20 | AAV53459 | Human adenosine A1  |
| 122 | 14.4 | 72.0 | 21 | 21 | AAV19077 | Human adenosine A1  | 195 | 14.4 | 72.0 | 22 | 20 | AAV53557 | Human adenosine A1  |
| 123 | 14.4 | 72.0 | 21 | 21 | AAV19101 | Human adenosine A1  | 196 | 14.4 | 72.0 | 22 | 20 | AAV53510 | Human adenosine A1  |
| 124 | 14.4 | 72.0 | 21 | 21 | AAV19124 | Human adenosine A1  | 197 | 14.4 | 72.0 | 22 | 20 | AAV53620 | Human adenosine A1  |
| 125 | 14.4 | 72.0 | 21 | 21 | AAV19146 | Human adenosine A1  | 198 | 14.4 | 72.0 | 22 | 20 | AAV53485 | Human adenosine A1  |
| 126 | 14.4 | 72.0 | 21 | 21 | AAV19167 | Human adenosine A1  | 199 | 14.4 | 72.0 | 22 | 20 | AAV53579 | Human adenosine A1  |
| 127 | 14.4 | 72.0 | 21 | 21 | AAV19187 | Human adenosine A1  | 200 | 14.4 | 72.0 | 22 | 20 | AAV53600 | Human adenosine A1  |
| 128 | 14.4 | 72.0 | 21 | 21 | AAV20845 | Human adenosine A1  | 201 | 14.4 | 72.0 | 22 | 21 | AAV19024 | Human adenosine A1  |
| 129 | 14.4 | 72.0 | 21 | 21 | AAV9526  | Adenosine A1 recep  | 202 | 14.4 | 72.0 | 22 | 21 | AAV19050 | Human adenosine A1  |
| 130 | 14.4 | 72.0 | 21 | 21 | AAV42514 | Adenosine recep     | 203 | 14.4 | 72.0 | 22 | 21 | AAV19075 | Human adenosine A1  |
| 131 | 14.4 | 72.0 | 21 | 21 | AAV32955 | Low adenosine anti  | 204 | 14.4 | 72.0 | 22 | 21 | AAV19099 | Human adenosine A1  |
| 132 | 14.4 | 72.0 | 21 | 21 | AAV32979 | Low adenosine anti  | 205 | 14.4 | 72.0 | 22 | 21 | AAV19122 | Human adenosine A1  |
| 133 | 14.4 | 72.0 | 21 | 21 | AAV33002 | Low adenosine anti  | 206 | 14.4 | 72.0 | 22 | 21 | AAV19144 | Human adenosine A1  |
| 134 | 14.4 | 72.0 | 21 | 21 | AAV33024 | Low adenosine anti  | 207 | 14.4 | 72.0 | 22 | 21 | AAV19165 | Human adenosine A1  |
| 135 | 14.4 | 72.0 | 21 | 21 | AAV33045 | Low adenosine anti  | 208 | 14.4 | 72.0 | 22 | 21 | AAV19185 | Human adenosine A1  |
| 136 | 14.4 | 72.0 | 21 | 21 | AAV33065 | Low adenosine anti  | 209 | 14.4 | 72.0 | 22 | 21 | AAV32902 | Low adenosine anti  |
| 137 | 14.4 | 72.0 | 21 | 21 | AAV33073 | Human adenosine re  | 210 | 14.4 | 72.0 | 22 | 21 | AAV32928 | Low adenosine anti  |
| 138 | 14.4 | 72.0 | 21 | 21 | AAV33077 | Human adenosine A1  | 211 | 14.4 | 72.0 | 22 | 21 | AAV32953 | Low adenosine anti  |
| 139 | 14.4 | 72.0 | 21 | 21 | AAV33114 | Human adenosine A1  | 212 | 14.4 | 72.0 | 22 | 21 | AAV32977 | Low adenosine anti  |
| 140 | 14.4 | 72.0 | 21 | 21 | AAV33038 | Human adenosine A1  | 213 | 14.4 | 72.0 | 22 | 21 | AAV33000 | Low adenosine anti  |
| 141 | 14.4 | 72.0 | 21 | 21 | AAV33061 | Human adenosine A1  | 214 | 14.4 | 72.0 | 22 | 21 | AAV33022 | Low adenosine anti  |
| 142 | 14.4 | 72.0 | 21 | 21 | AAV33083 | Human adenosine A1  | 215 | 14.4 | 72.0 | 22 | 21 | AAV33043 | Low adenosine anti  |
| 143 | 14.4 | 72.0 | 21 | 21 | AAV33044 | Human adenosine A1  | 216 | 14.4 | 72.0 | 22 | 21 | AAV33063 | Low adenosine anti  |
| 144 | 14.4 | 72.0 | 21 | 21 | AAV33024 | Human adenosine A1  | 217 | 14.4 | 72.0 | 22 | 21 | AAV33026 | Human adenosine A1  |
| 145 | 14.4 | 72.0 | 21 | 21 | AAV33077 | Adenosine A1 recep  | 218 | 14.4 | 72.0 | 22 | 21 | AAV33087 | Human adenosine A1  |
| 146 | 14.4 | 72.0 | 21 | 22 | AAV60954 | Ant i-adenosine, br | 219 | 14.4 | 72.0 | 22 | 21 | AAV33112 | Human adenosine A1  |
| 147 | 14.4 | 72.0 | 21 | 22 | AAV60954 | Ant i-adenosine, br | 220 | 14.4 | 72.0 | 22 | 21 | AAV33036 | Human adenosine A1  |
| 148 | 14.4 | 72.0 | 21 | 24 | AHL01646 | Rept ide nucleic ac | 221 | 14.4 | 72.0 | 22 | 21 | AAV33059 | Human adenosine A1  |
| 149 | 14.4 | 72.0 | 21 | 24 | AAV97502 | Receptor targeted   | 222 | 14.4 | 72.0 | 22 | 21 | AAV33081 | Human adenosine A1  |
| 150 | 14.4 | 72.0 | 22 | 19 | AAV47244 | Ant isense of ligan | 223 | 14.4 | 72.0 | 22 | 21 | AAV33002 | Human adenosine A1  |
| 151 | 14.4 | 72.0 | 22 | 19 | AAV47224 | Ant isense of ligan | 224 | 14.4 | 72.0 | 22 | 21 | AAV33022 | Human adenosine A1  |
| 152 | 14.4 | 72.0 | 22 | 19 | AAV47203 | Ant isense of ligan | 225 | 14.4 | 72.0 | 22 | 19 | AAV47081 | Ant isense of ligan |
| 153 | 14.4 | 72.0 | 22 | 19 | AAV47181 | Ant isense of ligan | 226 | 14.4 | 72.0 | 22 | 19 | AAV47042 | Ant isense of ligan |
| 154 | 14.4 | 72.0 | 22 | 19 | AAV47158 | Ant isense of ligan | 227 | 14.4 | 72.0 | 22 | 19 | AAV47021 | Ant isense of ligan |
| 155 | 14.4 | 72.0 | 22 | 19 | AAV47134 | Ant isense of ligan | 228 | 14.4 | 72.0 | 22 | 19 | AAV47001 | Ant isense of ligan |





|     |      |      |    |    |           |                    |     |      |      |    |    |           |                    |
|-----|------|------|----|----|-----------|--------------------|-----|------|------|----|----|-----------|--------------------|
| 521 | 14.4 | 72.0 | 29 | 20 | AAx53528  | Human adenosine A1 | 594 | 14.4 | 72.0 | 30 | 20 | AAx53307  | Human adenosine A1 |
| 522 | 14.4 | 72.0 | 29 | 20 | AAx53453  | Human adenosine A1 | 595 | 14.4 | 72.0 | 30 | 20 | AAx53275  | Human adenosine A1 |
| 523 | 14.4 | 72.0 | 29 | 20 | AAx53551  | Human adenosine A1 | 596 | 14.4 | 72.0 | 30 | 20 | AAx53242  | Human adenosine A1 |
| 524 | 14.4 | 72.0 | 29 | 20 | AAx53504  | Human adenosine A1 | 597 | 14.4 | 72.0 | 30 | 20 | AAx52899  | Human adenosine A1 |
| 525 | 14.4 | 72.0 | 29 | 20 | AAx53614  | Human adenosine A1 | 598 | 14.4 | 72.0 | 30 | 20 | AAx53527  | Human adenosine A1 |
| 526 | 14.4 | 72.0 | 29 | 20 | AAx53573  | Human adenosine A1 | 599 | 14.4 | 72.0 | 30 | 20 | AAx53452  | Human adenosine A1 |
| 527 | 14.4 | 72.0 | 29 | 20 | AAx53479  | Human adenosine A1 | 600 | 14.4 | 72.0 | 30 | 20 | AAx53550  | Human adenosine A1 |
| 528 | 14.4 | 72.0 | 29 | 20 | AAx53594  | Human adenosine A1 | 601 | 14.4 | 72.0 | 30 | 20 | AAx53503  | Human adenosine A1 |
| 529 | 14.4 | 72.0 | 29 | 20 | AAx53426  | Human adenosine A1 | 602 | 14.4 | 72.0 | 30 | 20 | AAx53572  | Human adenosine A1 |
| 530 | 14.4 | 72.0 | 29 | 21 | AAx53465  | Human adenosine A1 | 603 | 14.4 | 72.0 | 30 | 20 | AAx53593  | Human adenosine A1 |
| 531 | 14.4 | 72.0 | 29 | 21 | AAx53881  | Human adenosine A1 | 604 | 14.4 | 72.0 | 30 | 20 | AAx53478  | Human adenosine A1 |
| 532 | 14.4 | 72.0 | 29 | 21 | AAx53887  | Human adenosine A1 | 605 | 14.4 | 72.0 | 30 | 20 | AAx53425  | Human adenosine A1 |
| 533 | 14.4 | 72.0 | 29 | 21 | AAx53890  | Human adenosine A1 | 606 | 14.4 | 72.0 | 30 | 21 | AAx53464  | Human adenosine A1 |
| 534 | 14.4 | 72.0 | 29 | 21 | AAx53893  | Human adenosine A1 | 607 | 14.4 | 72.0 | 30 | 21 | AAx53887  | Human adenosine A1 |
| 535 | 14.4 | 72.0 | 29 | 21 | AAx53896  | Human adenosine A1 | 608 | 14.4 | 72.0 | 30 | 21 | AAx53884  | Human adenosine A1 |
| 536 | 14.4 | 72.0 | 29 | 21 | AAx53891  | Human adenosine A1 | 609 | 14.4 | 72.0 | 30 | 21 | AAx53887  | Human adenosine A1 |
| 537 | 14.4 | 72.0 | 29 | 21 | AAx53901  | Human adenosine A1 | 610 | 14.4 | 72.0 | 30 | 21 | AAx53890  | Human adenosine A1 |
| 538 | 14.4 | 72.0 | 29 | 21 | AAx53904  | Human adenosine A1 | 611 | 14.4 | 72.0 | 30 | 21 | AAx53893  | Human adenosine A1 |
| 539 | 14.4 | 72.0 | 29 | 21 | AAx53909  | Human adenosine A1 | 612 | 14.4 | 72.0 | 30 | 21 | AAx53896  | Human adenosine A1 |
| 540 | 14.4 | 72.0 | 29 | 21 | AAx53913  | Human adenosine A1 | 613 | 14.4 | 72.0 | 30 | 21 | AAx53899  | Human adenosine A1 |
| 541 | 14.4 | 72.0 | 29 | 21 | AAx53916  | Human adenosine A1 | 614 | 14.4 | 72.0 | 30 | 21 | AAx53907  | Human adenosine A1 |
| 542 | 14.4 | 72.0 | 29 | 21 | AAx53918  | Human adenosine A1 | 615 | 14.4 | 72.0 | 30 | 21 | AAx53904  | Human adenosine A1 |
| 543 | 14.4 | 72.0 | 29 | 21 | AAx53915  | Human adenosine A1 | 616 | 14.4 | 72.0 | 30 | 21 | AAx53906  | Human adenosine A1 |
| 544 | 14.4 | 72.0 | 29 | 21 | AAx53917  | Human adenosine A1 | 617 | 14.4 | 72.0 | 30 | 21 | AAx53909  | Human adenosine A1 |
| 545 | 14.4 | 72.0 | 29 | 21 | AAx53944  | Low adenosine anti | 618 | 14.4 | 72.0 | 30 | 21 | AAx53915  | Human adenosine A1 |
| 546 | 14.4 | 72.0 | 29 | 21 | AAx53971  | Low adenosine anti | 619 | 14.4 | 72.0 | 30 | 21 | AAx53917  | Human adenosine A1 |
| 547 | 14.4 | 72.0 | 29 | 21 | AAx53975  | Low adenosine anti | 620 | 14.4 | 72.0 | 30 | 21 | AAx53915  | Human adenosine A1 |
| 548 | 14.4 | 72.0 | 29 | 21 | AAx53982  | Low adenosine anti | 621 | 14.4 | 72.0 | 30 | 21 | AAx53269  | Low adenosine anti |
| 549 | 14.4 | 72.0 | 29 | 21 | AAx53981  | Low adenosine anti | 622 | 14.4 | 72.0 | 30 | 21 | AAx53278  | Low adenosine anti |
| 550 | 14.4 | 72.0 | 29 | 21 | AAx53984  | Low adenosine anti | 623 | 14.4 | 72.0 | 30 | 21 | AAx53275  | Low adenosine anti |
| 551 | 14.4 | 72.0 | 29 | 21 | AAx53986  | Low adenosine anti | 624 | 14.4 | 72.0 | 30 | 21 | AAx53278  | Low adenosine anti |
| 552 | 14.4 | 72.0 | 29 | 21 | AAx53989  | Low adenosine anti | 625 | 14.4 | 72.0 | 30 | 21 | AAx53275  | Low adenosine anti |
| 553 | 14.4 | 72.0 | 29 | 21 | AAx53992  | Low adenosine anti | 626 | 14.4 | 72.0 | 30 | 21 | AAx53281  | Low adenosine anti |
| 554 | 14.4 | 72.0 | 29 | 21 | AAx53292  | Low adenosine anti | 627 | 14.4 | 72.0 | 30 | 21 | AAx53284  | Low adenosine anti |
| 555 | 14.4 | 72.0 | 29 | 21 | AAx53294  | Low adenosine anti | 628 | 14.4 | 72.0 | 30 | 21 | AAx53286  | Low adenosine anti |
| 556 | 14.4 | 72.0 | 29 | 21 | AAx53297  | Low adenosine anti | 629 | 14.4 | 72.0 | 30 | 21 | AAx53289  | Low adenosine anti |
| 557 | 14.4 | 72.0 | 29 | 21 | AAx53299  | Low adenosine anti | 630 | 14.4 | 72.0 | 30 | 21 | AAx53294  | Low adenosine anti |
| 558 | 14.4 | 72.0 | 29 | 21 | AAx53016  | Low adenosine anti | 631 | 14.4 | 72.0 | 30 | 21 | AAx53297  | Low adenosine anti |
| 559 | 14.4 | 72.0 | 29 | 21 | AAx53303  | Low adenosine anti | 632 | 14.4 | 72.0 | 30 | 21 | AAx53299  | Low adenosine anti |
| 560 | 14.4 | 72.0 | 29 | 21 | AAx53307  | Low adenosine anti | 633 | 14.4 | 72.0 | 30 | 21 | AAx53015  | Low adenosine anti |
| 561 | 14.4 | 72.0 | 29 | 21 | AAx53078  | Human adenosine A1 | 634 | 14.4 | 72.0 | 30 | 21 | AAx53036  | Low adenosine anti |
| 562 | 14.4 | 72.0 | 29 | 21 | AAx53110  | Human adenosine A1 | 635 | 14.4 | 72.0 | 30 | 21 | AAx53044  | Human adenosine A1 |
| 563 | 14.4 | 72.0 | 29 | 21 | AAx53141  | Human adenosine A1 | 636 | 14.4 | 72.0 | 30 | 21 | AAx53077  | Human adenosine A1 |
| 564 | 14.4 | 72.0 | 29 | 21 | AAx53171  | Human adenosine A1 | 637 | 14.4 | 72.0 | 30 | 21 | AAx53109  | Human adenosine A1 |
| 565 | 14.4 | 72.0 | 29 | 21 | AAx53200  | Human adenosine A1 | 638 | 14.4 | 72.0 | 30 | 21 | AAx53140  | Human adenosine A1 |
| 566 | 14.4 | 72.0 | 29 | 21 | AAx53228  | Human adenosine A1 | 639 | 14.4 | 72.0 | 30 | 21 | AAx53170  | Human adenosine A1 |
| 567 | 14.4 | 72.0 | 29 | 21 | AAx53255  | Human adenosine A1 | 640 | 14.4 | 72.0 | 30 | 21 | AAx53199  | Human adenosine A1 |
| 568 | 14.4 | 72.0 | 29 | 21 | AAx53281  | Human adenosine A1 | 641 | 14.4 | 72.0 | 30 | 21 | AAx53227  | Human adenosine A1 |
| 569 | 14.4 | 72.0 | 29 | 21 | AAx53306  | Human adenosine A1 | 642 | 14.4 | 72.0 | 30 | 21 | AAx53254  | Human adenosine A1 |
| 570 | 14.4 | 72.0 | 29 | 21 | AAx53340  | Human adenosine A1 | 643 | 14.4 | 72.0 | 30 | 21 | AAx53280  | Human adenosine A1 |
| 571 | 14.4 | 72.0 | 29 | 21 | AAx53353  | Human adenosine A1 | 644 | 14.4 | 72.0 | 30 | 21 | AAx53305  | Human adenosine A1 |
| 572 | 14.4 | 72.0 | 29 | 21 | AAx53375  | Human adenosine A1 | 645 | 14.4 | 72.0 | 30 | 21 | AAx53329  | Human adenosine A1 |
| 573 | 14.4 | 72.0 | 29 | 21 | AAx53396  | Human adenosine A1 | 646 | 14.4 | 72.0 | 30 | 21 | AAx53352  | Human adenosine A1 |
| 574 | 14.4 | 72.0 | 29 | 21 | AAx53416  | Human adenosine A1 | 647 | 14.4 | 72.0 | 30 | 21 | AAx53374  | Human adenosine A1 |
| 575 | 14.4 | 72.0 | 29 | 21 | AAx53648  | Human adenosine A1 | 648 | 14.4 | 72.0 | 30 | 21 | AAx53395  | Human adenosine A1 |
| 576 | 14.4 | 72.0 | 30 | 19 | AAx547075 | Antisense oligonuc | 649 | 14.4 | 72.0 | 30 | 21 | AAx53367  | Human adenosine A1 |
| 577 | 14.4 | 72.0 | 30 | 19 | AAx547216 | Antisense oligonuc | 650 | 14.4 | 72.0 | 31 | 19 | AAx53647  | Human adenosine A1 |
| 578 | 14.4 | 72.0 | 30 | 19 | AAx547195 | Antisense oligonuc | 651 | 14.4 | 72.0 | 31 | 19 | AAx547074 | Antisense oligonuc |
| 579 | 14.4 | 72.0 | 30 | 19 | AAx547173 | Antisense oligonuc | 652 | 14.4 | 72.0 | 31 | 19 | AAx547172 | Antisense oligonuc |
| 580 | 14.4 | 72.0 | 30 | 19 | AAx547150 | Antisense oligonuc | 653 | 14.4 | 72.0 | 31 | 19 | AAx547149 | Antisense oligonuc |
| 581 | 14.4 | 72.0 | 30 | 19 | AAx547126 | Antisense oligonuc | 654 | 14.4 | 72.0 | 31 | 19 | AAx547125 | Antisense oligonuc |
| 582 | 14.4 | 72.0 | 30 | 19 | AAx547101 | Antisense oligonuc | 655 | 14.4 | 72.0 | 31 | 19 | AAx547100 | Antisense oligonuc |
| 583 | 14.4 | 72.0 | 30 | 19 | AAx546930 | Antisense oligonuc | 656 | 14.4 | 72.0 | 31 | 19 | AAx546929 | Antisense oligonuc |
| 584 | 14.4 | 72.0 | 30 | 19 | AAx546898 | Antisense oligonuc | 657 | 14.4 | 72.0 | 31 | 19 | AAx546897 | Antisense oligonuc |
| 585 | 14.4 | 72.0 | 30 | 19 | AAx546865 | Antisense oligonuc | 658 | 14.4 | 72.0 | 31 | 19 | AAx546864 | Antisense oligonuc |
| 586 | 14.4 | 72.0 | 30 | 19 | AAx546522 | Antisense oligonuc | 659 | 14.4 | 72.0 | 31 | 19 | AAx546830 | Antisense oligonuc |
| 587 | 14.4 | 72.0 | 30 | 19 | AAx547020 | Antisense oligonuc | 660 | 14.4 | 72.0 | 31 | 19 | AAx546521 | Antisense oligonuc |
| 588 | 14.4 | 72.0 | 30 | 19 | AAx547048 | Antisense oligonuc | 661 | 14.4 | 72.0 | 31 | 19 | AAx547019 | Antisense oligonuc |
| 589 | 14.4 | 72.0 | 30 | 19 | AAx546961 | Antisense oligonuc | 662 | 14.4 | 72.0 | 31 | 19 | AAx546960 | Antisense oligonuc |
| 590 | 14.4 | 72.0 | 30 | 19 | AAx546991 | Antisense oligonuc | 663 | 14.4 | 72.0 | 31 | 19 | AAx547047 | Antisense oligonuc |
| 591 | 14.4 | 72.0 | 30 | 20 | AAx53397  | Human adenosine A1 | 664 | 14.4 | 72.0 | 31 | 19 | AAx546990 | Antisense oligonuc |
| 592 | 14.4 | 72.0 | 30 | 20 | AAx53368  | Human adenosine A1 | 665 | 14.4 | 72.0 | 31 | 20 | AAx53396  | Human adenosine A1 |
| 593 | 14.4 | 72.0 | 30 | 20 | AAx53338  | Human adenosine A1 | 666 | 14.4 | 72.0 | 31 | 20 | AAx53367  | Human adenosine A1 |





999 13.4 72.0 35 19 AAV4/070  
 Ant isense oligonucleotide  
 990 13.4 72.0 35 19 AAV46517  
 Ant isense oligonucleotide  
 991 13.4 72.0 35 19 AAV47015  
 Ant isense oligonucleotide  
 992 13.4 72.0 35 19 AAV46956  
 Ant isense oligonucleotide  
 993 13.4 72.0 35 19 AAV47043  
 Ant isense oligonucleotide  
 994 13.4 72.0 35 19 AAV46986  
 Ant isense oligonucleotide  
 995 13.4 72.0 35 20 AAX33092  
 Human adenosine A1  
 996 13.4 72.0 35 20 AAX33063  
 Human adenosine A1  
 997 13.4 72.0 35 20 AAX33333  
 Human adenosine A1  
 998 13.4 72.0 35 20 AAX33002  
 Human adenosine A1  
 999 13.4 72.0 35 20 AAX33270  
 Human adenosine A1  
 990 13.4 72.0 35 20 AAX33237  
 Human adenosine A1  
 991 13.4 72.0 35 20 AAX33203  
 Human adenosine A1  
 992 13.4 72.0 35 20 AAX33168  
 Human adenosine A1  
 993 13.4 72.0 35 20 AAX33132  
 Human adenosine A1  
 994 13.4 72.0 35 20 AAX33095  
 Human adenosine A1  
 995 13.4 72.0 35 20 AAX33057  
 Human adenosine A1  
 996 13.4 72.0 35 20 AAX32894  
 Human adenosine A1  
 997 13.4 72.0 35 20 AAX33447  
 Human adenosine A1  
 998 13.4 72.0 35 21 AAF18733  
 Human adenosine A1  
 999 13.4 72.0 35 21 AAF18768  
 Human adenosine A1  
 990 13.4 72.0 35 21 AAF18802  
 Human adenosine A1  
 991 13.4 72.0 35 21 AAF18845  
 Human adenosine A1  
 992 13.4 72.0 35 21 AAF18622  
 Human adenosine A1  
 993 13.4 72.0 35 21 AAF18660  
 Human adenosine A1  
 994 13.4 72.0 35 21 AAF18697  
 Human adenosine A1  
 995 13.4 72.0 35 21 AAF18733  
 Human adenosine A1  
 996 13.4 72.0 35 21 AAF18768  
 Human adenosine A1  
 997 13.4 72.0 35 21 AAF18802  
 Human adenosine A1  
 998 13.4 72.0 35 21 AAF18845  
 Human adenosine A1  
 999 13.4 72.0 35 21 AAF19012  
 Human adenosine A1  
 990 13.4 72.0 35 21 AAF19048  
 Human adenosine A1  
 991 13.4 72.0 35 21 AAX32338  
 Low adenosine anti  
 992 13.4 72.0 35 21 AAX32501  
 Low adenosine anti  
 993 13.4 72.0 35 21 AAX32539  
 Low adenosine anti  
 994 13.4 72.0 35 21 AAX32576  
 Low adenosine anti  
 995 13.4 72.0 35 21 AAX32612  
 Low adenosine anti  
 996 13.4 72.0 35 21 AAX32647  
 Low adenosine anti

## ALIGNMENTS

RESULT 1  
 AA033439  
 10 AA033439 standard; tRNA; 20 bp.  
 XX  
 AC  
 AA033439;  
 XX  
 01 JUL 2002 (first entry)  
 XX  
 DE TGF beta1 antisense oligonucleotides.  
 XX  
 KW Transforming growth factor; TGF; cancer; thymoma; germ cell tumour;  
 KW multiple myeloma; melanoma; haematopoietic disease; thrombocytopoiesis;  
 KW gene therapy; cytostatic; haemostatic; SS.  
 XX  
 OS Unidentified.  
 XX  
 UN W020020479-A1.  
 XX  
 PD 17 JAN 2002.  
 XX  
 PF 06 JUL 2001; 2001W0 US21420.  
 XX  
 PR 06 JUL 2000; 2000US 216256P.  
 XX  
 PA (AV18 ) AV1 H00HAKM6 IN\*.  
 XX

PI Bartelmez SB, Iverson PL;  
 WR: 2002 145761/25.  
 XX  
 PF New human stem cell composition, useful for treating various cancers;  
 PI cell, ovarian cancer, melanoma, testicular cancer, lung cancer or brain  
 cancer, as well as for other non malignant hematopoietic diseases, e.g.,  
 thrombocytopoiesis  
 XX  
 OS Claim 5; Page 47; Cyp: Enclish.  
 XX  
 CC The present invention relates to transforming growth factor (TGF) beta  
 blocking agent treated human stem cell compositions which are capable of  
 rapid in vivo reconstitution of the haematopoietic system of a subject.  
 CC The composition comprises a cell population enriched for human stem  
 CC cells, the stem cells treated ex vivo with an oligonucleotide antisense to  
 CC TGF beta, where the viability and differentiation state of the stem  
 CC cells is preserved in culture longer than stem cells not subjected  
 CC to TGF-beta antisense treatment. The human stem cell composition is  
 CC useful for promoting the rapid engraftment of long term repopulation  
 CC haematopoietic stem cells (LTR-HSC) following in vivo administration  
 CC and facilitate the rapid proliferation of LTR-HSC in vitro. The HSC  
 CC containing cell population is useful for treating various cancers,  
 CC including ovarian cancer, thymomas, germ cell tumours, multiple myeloma,  
 CC melanoma, testicular cancer, lung cancer and brain cancer as well as for  
 CC other non-malignant haematopoietic diseases, e.g., thrombocytopoiesis.  
 CC Sequences of the invention are also used in gene therapy. The present  
 CC sequence is TGF beta1 antisense oligonucleotide.  
 XX  
 SQ Sequence 20 bp; 3 A; 3 C; 13 G; 1 T; 0 other;  
 Query Match 100.0%; Score 20; ID 24; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 42;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 0Y 1 GAGGAGGAGATGGGAGAGG\* 20  
 10 1 GAGGAGGAGATGGGAGAGG\* 20  
 1b 1 GAGGAGGAGATGGGAGAGG\* 20  
 RESULT 2  
 AA105419/1  
 10 AA105419 standard; mRNA; 24 bp.  
 XX  
 AC  
 AA105419;  
 XX  
 14 JUN 1996 (first entry)  
 XX  
 DE Human TGF beta1 mRNA fragment.  
 XX  
 KW Fibroblast growth factor; TGF; antisense; AS; TGF; inhibitor; therapy;  
 KW Kyo-to rat aortic smooth muscle cell; KASME; liposome; stroke;  
 KW haemoglobin neuraminidase; UN; Sendai virus; SV; hypertension; DPL;  
 KW liposome forming lipid; restenosis; hyperplasia; atherosclerosis;  
 KW and restenosis; myocardial hypertrophy; aneurysm; TGF beta1;  
 KW transforming growth factor beta1; SS.  
 XX  
 OS Synthetic.  
 XX  
 UN W0950330-A1.  
 XX  
 PD 16 NOV 1995.  
 XX  
 PF 28 AUG 1995; 95W01805420.  
 XX  
 DE 10 MAY 1994; 94US 024147Z.  
 XX  
 PA (US2002) US20020479-A1.  
 XX  
 PR 06 JUL 2000; 2000US 216256P.  
 XX  
 PA (AV18 ) AV1 H00HAKM6 IN\*.  
 XX



PT Prodn. of liposome(s) for fusion with cells - used esp. for delivery  
 XX of antisense nucleic acids to inhibit cellular proliferation.  
 PS Example 5; Page 52; 98pp; English.  
 XX  
 CC This sequence represents a fragment of human transforming growth  
 CC factor-beta1 (TGF-beta1) mRNA. The antisense sequence represented by  
 CC AAT05420 was created from this sequence. AAT05420, AAT05422, AAT05424,  
 CC AAT05426, AAT05428-9, AAT05431, AAT05433, AAT05435 and AAT05414 all  
 CC represent antisense oligonucleotides that are used in the liposomes of  
 CC the invention. The liposomes of the invention are produced by combining  
 CC two liposomes to produce a liposome for fusion with cells. The first  
 CC liposome is produced by agitating purified haemagglutinin-neuraminidase  
 CC (HN), and fusion proteins of Sendai virus (SV) with liposome forming  
 CC lipids (LFLs) in an aqueous medium. The second liposome is produced by  
 CC agitating an agent of interest with LFLs (where at least 25% of the  
 CC lipids are cationic), in an aqueous solution. The agents are preferably  
 CC antisense oligonucleotides, such as AAT05420. The antisense sequences  
 CC inhibit the expression of a protein associated with cellular  
 CC proliferation. They can be used for treating diseases such as  
 CC hypertension, restenosis, hyperplasia, atherosclerosis, angiogenesis,  
 CC myocardial hypertrophy, strokes and aneurysms.  
 XX  
 SQ Sequence 24 BP; 1 A; 14 C; 6 G; 3 U; 0 other;

Query Match 100.0%; Score 20; DB 16; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 31;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGCGGCATGCGGAGGC 20  
 |||||  
 DB 20 GAGGCGGCATGCGGAGGC 1

## RESULT 4

AA075041/  
 ID AA075041 standard; mRNA: 24 BP.

AC AA075041;

DT 15-AUG-1995 (first entry)

XX Human TGF beta(1) mRNA.

XX Human transforming growth factor beta 1; hTGFb1; antisense therapy;  
 XX restenosis prevention; cardiovascular angioplasty; ss.

XX Synthetic.

XX W9426888-A.

XX 24 NOV-1994.

XX 18 MAY-1994; 94WO-US05566.

XX 19 MAY-1994; 94US-0063980.

XX 20-AUG-1994; 94US-0110294.

PA (STUD ) UNIV IELAND STANFORD JUNIOR.

PI Izan VI;

DR WPI: 1995-006785/01.

XX Inhibiting cellular activity associated with vascular lesions -  
 PT with antisense oligomers against cyclin or cyclin dependent  
 PT kinase genes, partic. for preventing restenosis after  
 PT cardiovascular angioplasty.

PS Disclosure: Page 8; 77pp; English.

XX AA075041 is a human TGF-beta(1) (hTGFb1) mRNA, it was used in  
 CC development of an antisense oligomer which inhibits the expression of

CC TGFb1. When administered to a site of lesion formation the  
 CC antisense oligomer helps prevent restenosis, after cardiovascular  
 CC angioplasty.

XX Sequence 24 BP; 1 A; 14 C; 6 G; 3 U; 0 other;

Query Match 100.0%; Score 20; DB 16; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 31;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGCGGCATGCGGAGGC 20  
 |||||  
 DB 20 GAGGCGGCATGCGGAGGC 1

## RESULT 4

AA081261/  
 ID AA081261 standard; mRNA: 18 BP.

AC AA081261;

XX 07-SEP-1995 (first entry)

XX Ribozyme target sequence in TGF-beta mRNA (bases 833-850).

XX Target site; ribozyme; hammerhead; hairpin; hepatitis delta virus;  
 KW group 1 intron; RNaseP RNA motif; transforming growth factor-beta;  
 KW TGF-beta; fibrosis; connective; tissue disease; TGF-alpha; inhibin;  
 KW epidermal growth factor; EGF; activin; amphiregulin; insulin;  
 KW bone morphogenic protein; Fibroblast growth factor; relaxin; ss.

XX Homo sapiens.

XX W9429452-A.

XX 22-DEC-1994.

XX 02-JUN-1994; 94WO-US06331.

XX 09-JUN-1994; 93US-0074343.

XX (RIBO-) RIBOZYME PHARM INC.

XX Draper KS;

XX WPI: 1995-051612/07.

XX Enzymatic RNA molecule with, e.g. a hammerhead or hairpin motif  
 PT - cleaves mRNA associated with fibrous or connective tissue  
 PT disease, and is useful for treatment or prophylaxis of such  
 PT diseases

PS Claim 3; Page 4; 6pp; English.

XX The sequences (AA081238-304) represent the target sites where a ribozyme  
 CC (hammerhead, hairpin, hepatitis delta virus, group 1 intron or RNaseP  
 CC RNA motif) cleaves the mRNA of the transforming growth factor-beta  
 CC (TGF-beta) gene. This sequence corresponds to bases 833-850 of the  
 CC TGF-beta mRNA. The ribozymes can also target the mRNAs of genes  
 CC associated with the development or maintenance of fibrous or connective  
 CC tissue disease in order to prevent or treat these diseases. Such genes  
 CC include TGF-alpha or beta, epidermal growth factor, inhibins, activins,  
 CC amphiregulin, bone morphogenic proteins, fibroblast growth factors 3 and  
 CC b, insulin growth factor 1 or 2, insulin or relaxin.

XX Sequence 18 BP; 1 A; 12 C; 3 G; 2 U; 0 other;

Query Match 90.0%; Score 18; DB 16; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 2e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GAGGCGGCATGCGGAGGC 20  
 |||||

```

Db      18 GGGGGGATGGGGAGG* 1
RESULT 5
AAV48412
ID      AAV48412 standard; DNA: 21 BP.
XX
AC      AAV48412:
XX
XX      15 oct 1998 (first entry)
XX
XX      Transforming growth factor beta 1 antisense oligonucleotide A1.
XX
XX      Transforming growth factor beta 1; TGF-beta-1;
KW      antisense oligonucleotide; modulator; gene expression; ss.
XX
XX      Synthetic.
XX
XX      Homo sapiens.
XX
XX      E08565/9 A1.
XX
XX      05 AUG 1998.
XX
XX      31-JAN 1997; 9/EP 0101541.
XX
XX      31-JAN 1997; 9/EP 0101541.
XX
XX      (BIOG ) BIOGEN-IDEC GEN BIOMOLEKULARE DIAGNOSTIK.
XX
XX      Inyech W. Schlundsteinen K.
XX
XX      WPI: 1998 400910/49.
XX
XX      Preparation of antisense oligonucleotide(s) which lack four runs of
XX      consecutive adenosine or inosine - and have specific ratio of
XX      residues able to form two or three hydrogen bonds, have greater
XX      activity and reduced toxicity, used therapeutically or to modulate
XX      growth of cells in culture
XX
XX      Example 1: Fig 6a: 286pp; English.
XX
XX      AAV48412-84 represent antisense oligonucleotides directed against
XX      transforming growth factor beta 1 (tGF-beta 1). The oligonucleotides
XX      exemplify the invention. The specification describes oligonucleotides
XX      that contain 8-40 nucleotides, which contain at most 8 nucleotides that
XX      can each form three hydrogen bonds to cytosine; do not contain four
XX      consecutive nucleotides able to form three H bonds each to form
XX      consecutive cytosines; do not contain two sequences of three consecutive
XX      nucleotides each able to form three H-bonds to three consecutive
XX      cytosines, and the ratio between residues able to form two H-bonds each
XX      (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
XX      oligonucleotides are used to modulate expression of genes, particularly
XX      the genes for p53, ErbB-2, JunB, JunD, TGF-beta 1 or beta 2 to control
XX      proliferation of primary cell cultures (e.g. bone marrow stem, liver or
XX      kidney cells, osteoblasts, osteoblasts and/or keratinocytes). The
XX      oligonucleotides can also be used to analyse function of proteins (by
XX      affecting their expression or activity) and therapeutically, e.g. in
XX      cases of cancer or (targeting TGF) for stimulating the immune system.
XX
XX      Sequence 21 BP: 3 A; 5 C; 12 G; 1 T; 0 other;
XX
XX      Query Match. 85.0%; Score 17; DB 19; Length 21;
XX      Best local Similarity 100.0%; Pred. No. 50002;
XX      Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX      1 GAGGGGAGGATGGGGAGG* 17
XX      11111111111111111111
XX      5 GAGGGGAGGATGGGGAGG* 21
XX
XX      RESULT 6
XX      AAV48410/7
XX      ID      AAV48410/7 standard; DNA: 45 BP.
XX
XX      18 GGGGGGATGGGGAGG* 1
XX
XX      AAV48410/7:
XX
XX      26 MAR 2002 (first entry)
XX
XX      Mouse clonked 2 cDNA cloning forward primer.
XX
XX      Clonked 2; cysteine knot motif; nephrotropic; cardiant; immunomodulation;
KW      hepatotropic; antiinflammatory; and thyroid; cytostatic; neuroprotective;
KW      antitumor; hypotensive; antiarrhythmic; antiarteriosclerotic; muscular;
KW      and diatheric; anorectic; gene therapy; cell therapy; antisense therapy;
XX      mouse; PCR primer; ss.
XX
XX      Mus musculus.
XX
XX      WU200192408 AZ.
XX
XX      06 APR 2001.
XX
XX      29 MAY 2001; 2001WO 081747B.
XX
XX      01 JUN 2000; 2000US 208556P.
XX      04 AUG 2000; 2000US 223542P.
XX
XX      (AMGE ) AMGEN INC.
XX
XX      Paszty CL. Gao Y.
XX
XX      WPI: 2000 111425/15.
XX
XX      New human and mouse cysteine knot polypeptide designated as clonked 2,
XX      for treatment of preventing kidney, heart (e.g. myocardial infarction)
XX      or liver (e.g. hepatitis) diseases
XX
XX      Example 2: Page 19; 17pp; English.
XX
XX      The invention relates to polypeptides comprising a cysteine knot motif and
XX      designated as clonked 2, derived from human and mouse. The clonked 2
XX      polypeptides can be expressed by standard recombinant methodology. The
XX      clonked 2 polypeptides are useful in gene therapy and antisense
XX      therapy. The clonked 2 polypeptides and polynucleotides are useful for
XX      treating, preventing, ameliorating or detecting diseases and disorders of
XX      the kidney (e.g. anemia, hypertension or low blood pressure), heart (e.g.
XX      cardiac hypertrophy, congestive heart failure, myocardial infarction,
XX      arrhythmias, atherosclerosis, hypertension or low blood pressure),
XX      skeletal muscle (e.g. muscular dystrophy or cachexia), placenta (e.g.
XX      congenital abnormalities or miscarriage), liver (e.g. hepatitis or
XX      cirrhosis), pancreas (e.g. diabetes or pancreatitis), thyroid (e.g.
XX      Grave's disease or myxedema) or adrenal cortex (e.g. Cushing's disease
XX      or Addison's disease), homeostasis of metabolic diseases (e.g. obesity,
XX      cancer or myopathies), infections, or autoimmune diseases. Selective
XX      binding agents may be used to modulate the biological activities of
XX      clonked 2 polypeptides or to detect clonked 2 polypeptide levels in a
XX      sample. Transgenic non human animals are useful for drug candidate
XX      screening. The present sequence represents a PCR primer for cloning the
XX      mouse clonked 2 polypeptide encoding cDNA.
XX
XX      Sequence 45 BP: 9 A; 19 C; 8 G; 9 T; 0 other;
XX
XX      Query Match. 85.0%; Score 15.2; DB 24; Length 45;
XX      Best local Similarity 85.0%; Pred. No. 260002;
XX      Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX      1 GAGGGGAGGATGGGGAGG* 20
XX      11111111111111111111
XX      31 GAGGGGAGGATGGGGAGG* 12
XX
XX      RESULT 7
XX      AAV48418
XX      ID      AAV48418 standard; DNA: 18 BP.
XX
XX      AAV48418:
XX
XX      18 GGGGGGATGGGGAGG* 1

```

```

XX 15-01-1998 (first entry)
XX Transforming growth factor beta 1 antisense oligonucleotide N6.
DE Transforming growth factor beta-1; TGF-beta-1;
KW Antisense oligonucleotide; modulate; gene expression; ss.
XX
XX Synthetic.
OS Homo Sapiens.
XX EP856579-A1.
XX 05-AUG-1998.
XX 31-JAN-1997; 97EP-0101541.
XX 31-JAN-1997; 97EP-0101541.
XX (R1-3) B1-6N-S11K GHS B1-6N-EKULARE DIA-N-S11K.
XX Brysch W. Schlundtenslegen K;
XX WPI: 1998-400910/45.
XX Preparation of antisense oligonucleotide(s) which lack long runs of
PT consecutive guanine or inosine - and have specific ratio of
PT residues able to form two or three hydrogen bonds, have greater
PT activity and reduced toxicity, used therapeutically or to modulate
PT growth of cells in culture
XX
XX Example 1; Fig 3a; 286pp; English.
XX
XX AAV48412-84 represent antisense oligonucleotides directed against
XX transforming growth factor beta-1 (TGF-beta-1). The oligonucleotides
XX exemplify the invention. The specification describes oligonucleotides
XX that contain 8-30 nucleotides, which contain at most 8 nucleotides that
XX can each form three hydrogen bonds to cytosine; do not contain four
XX consecutive nucleotides able to form three H-bonds each to four
XX consecutive cytosines; do not contain two sequences of three consecutive
XX nucleotides each able to form three H-bonds to three consecutive
XX cytosines, and the ratio between residues able to form two H-bonds each
XX (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
XX oligonucleotides are used to modulate expression of genes, particularly
XX the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control
XX proliferation of primary cell cultures (e.g. bone marrow stem, liver or
XX kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
XX oligonucleotides can also be used to analyse function of proteins (by
XX altering their expression or activity) and therapeutically, e.g. in
XX cases of cancer or (targeting TGF) for stimulating the immune system.
XX
XX Sequence 18 BP; 2 A; 4 C; 11 G; 1 T; 0 other;
XX
XX Query Match 75.0%; Score 15; DB 19; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 3,2e+04;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 GAAAGGAGGATAGGG 15
XX 11:|||||
XX
XX 4 GAAAGGAGGATAGGG 18
XX
XX
XX RESULT 8
XX ARK14716/1
XX ID ARK14716 standard; DNA; 24 BP.
XX
XX ARK14716;
XX
XX 24 APR 2002 (first entry)
XX
XX Nucleic acid probe #2 incorporating black hole quencher.
XX
XX Black hole quencher; BHQ; probe; ss.

```

```

XX Synthetic.
XX OS
XX PN W0200186001 A1.
XX
XX 15-NOV-2001.
XX
XX 08-MAY-2001; 2001W-0815082.
XX
XX 09-MAY-2000; 2000US-0567863.
XX
XX (Bios.) BIOSARCH TECHNOLOGIES INC.
XX
XX Cook RM, Lytle M, Dick D;
XX WPI: 2002-147491/19.
XX
XX Novel black hole quenchers for detecting and quantifying chemical and
XX biological substances, contains optionally substituted aryl and/or
XX heteroaryl radicals, covalently linked through exocyclic diazo bond
XX
XX Disclosure; Fig 8; 95pp; English.
XX
XX The invention relates to a black hole quencher (BHQ) (1) of excited state
XX energy having a structure comprising at least three radicals from
XX optionally substituted aryl and/or heteroaryl, where at least two of the
XX radicals are covalently linked through an exocyclic diazo bond. The
XX quencher further comprises a reactive functional group providing a locus
XX for conjugation of the quencher to a carrier molecule. (1) is useful for:
XX (a) determining whether a sample contains an enzyme; (b) determining
XX whether a compound alters an activity of an enzyme; (c) detecting a
XX nucleic acid target sequence; (d) detecting amplification of a target
XX sequence; (e) ascertaining whether a first nucleic acid and a second
XX nucleic acid hybridise; (f) probing a microarray for the presence of a
XX compound; and (g) detecting or quantifying a molecular species. The
XX present sequence represents a probe incorporating an exemplary BHQ used
XX in the method of the invention.
XX
XX Sequence 24 BP; 2 A; 14 C; 4 G; 5 T; 0 other;
XX
XX Query Match 74.0%; Score 14.8; DB 24; Length 24;
XX Best Local Similarity 88.9%; Pred. No. 3,8e+04;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 2 AGAGGAGGATAGGGAGG 19
XX 11:|||||
XX
XX 21 AGAGGAGGATAGGGAGG 4
XX
XX
XX RESULT 9
XX AAF23639
XX ID AAF23639 standard; DNA; 25 BP.
XX
XX AAF23639;
XX
XX 27-MAR 2001 (first entry)
XX
XX Tagman probe.
XX
XX Tagman probe; hybridisation probe; primer; ss.
XX
XX Unidentified.
XX
XX Key location/qualifiers
XX modified_base 1
XX /★Tad d
XX /mod_base OTHER
XX /note "OTHER FAM"
XX
XX modified_base 25
XX /★Tad b
XX /mod_base OTHER
XX /note "OTHER FAM"
XX

```

```

IN W020007547H A1.
XX
PD 14 DEC 2000.
XX
PF 08 JUN 2000; 2000W0 US1614B.
XX
PR 09 JUN 1999; 900S 014847b.
PR 08 JUN 2000; 2000US 014847b.
PA (BLOS ) BIOSEARCH TECHNOLOGIES INC.
XX
PT Cook RM.
XX
DR WPI; 2001 080601/09.
XX
XX New nucleic acid compounds used as primers for amplifying DNA and
PT conformationally assisted probes for analyzing or quantitating DNA
XX
PS Example 1; Page 54; 71pp; English.
XX
XX The present invention relates to novel probes, which can be used as
CC hybridisation probes for analysing and quantitating target nucleic acid
CC by 5'-nuclease assay and/or rolling circle amplification and as primers
CC for amplifying DNA by PCR, nucleic acid sequence based amplification
CC (NASBA) and/or strand displacement amplification (SDA). The probes detect
CC nucleic acids rapidly, reliably and quantitatively with high sensitivity.
CC The present sequence is one such probe.
XX
SQ Sequence 25 BP; 5 A; 4 C; 14 G; 4 T; 0 other;

```

```

Query Match 74.0K; Score 14.8; DB 22; Length 25;
Best Local Similarity 88.9K; Pred. No. 3,86004;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGGAGGAGATGGGAGG 19
    III 11111111111

```

```

DB 4 AGGAGGAGATGGGAGG 21

```

```

RESULT 10
AAAF26640

```

```

ID AAF26640 standard; DNA; 25 BP.

```

```

XX AAF26640;

```

```

XX 27 MAR 2001 (first entry)

```

```

XX CAP probe.

```

```

XX CAP probe; hybridisation probe; primer; conformationally assisted probe;
KW conformationally assisted probe; ss.

```

```

XX unidentified.

```

```

XX Key Location/Qualifiers
FH modified_base 1
FT /starq a
FT /mod_base OTHER
FT /note "OTHER FAM-CBPd."

```

```

FT modified_base 25
FT /starq b
FT /mod_base OTHER
FT /note "OTHER CHOL-TAMRA"

```

```

XX W020007547H A1.

```

```

XX 14 DEC 2000.

```

```

XX 08 JUN 2000; 2000W0 US1614B.

```

```

XX 09 JUN 1999; 900S 014847b.

```

```

XX 08 JUN 2000; 2000US 014847b.

```

```

PA (BLOS ) BIOSEARCH TECHNOLOGIES INC.
XX
XX Cook RM.
XX
XX WPI; 2001 080601/09.

```

```

XX New nucleic acid compounds used as primers for amplifying DNA and
PT conformationally assisted probes for analyzing or quantitating DNA
XX
PS Example 1; Page 54; 71pp; English.
XX
XX The present invention relates to novel probes, which can be used as
CC hybridisation probes for analysing and quantitating target nucleic acid
CC by 5'-nuclease assay and/or rolling circle amplification and as primers
CC for amplifying DNA by PCR, nucleic acid sequence based amplification
CC (NASBA) and/or strand displacement amplification (SDA). The probes detect
CC nucleic acids rapidly, reliably and quantitatively with high sensitivity.
CC The present sequence is one such probe; a conformationally assisted
CC probe (CAP).
XX
SQ Sequence 25 BP; 5 A; 4 C; 14 G; 4 T; 0 other;

```

```

Query Match 74.0K; Score 14.8; DB 22; Length 25;
Best Local Similarity 88.9K; Pred. No. 3,86004;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGGAGGAGATGGGAGG 19
    III 11111111111

```

```

DB 4 AGGAGGAGATGGGAGG 21

```

```

RESULT 11
AAFK4714/c

```

```

ID AFK4714 standard; DNA; 25 BP.

```

```

XX AFK4714;

```

```

XX 23 APR 2002 (first entry)

```

```

XX Dual labeled probe.

```

```

XX Dual labeled probe; black hole quencher; BHQ; probe; ss.

```

```

XX Synthesized.

```

```

XX Key Location/Qualifiers
FH modified_base 1
FT /starq a
FT /mod_base A
FT /note "optionally labeled FAM, Cy3 or Cy5"

```

```

FT modified_base 25
FT /starq b
FT /mod_base G
FT /note "optionally labeled with quencher TAMRA, DAPI,
FT BQ1, BQ2, or BQ3"

```

```

XX W0200186001 A1.

```

```

XX 15 NOV 2001.

```

```

XX 08 MAY 2001; 2001W0 US15082.

```

```

XX 09-MAY 2000; 2000US 0567864.

```

```

XX (BLOS ) BIOSEARCH TECHNOLOGIES INC.

```

```

XX Cook RM. Lytle B. Black D;

```

```

XX WPI; 2002 147491/19.

```

```

XX Novel black hole quenchers for detection and quantifying chemical and
PT biological substances, containing optionally substituted aryl and/or
PT heteroaryl radicals, covalently linked through exocyclic diacyl bond

```

|                          |  |  |
|--------------------------|--|--|
| PT                       | Real-time monitoring of nucleic acid amplification reaction - using  |  |
| PT                       | two fluorescent indicators generating signals proportional to amount |  |
| XX                       | of amplification prod. and volume of reaction mixture                |  |
| XX                       | Example: Page 13; 25pp; English.                                     |  |
| XX                       |  |  |
| CC                       | A 296 bp segment of a target DNA encoding human beta-actin was PCR   |  |
| CC                       | amplified using the primer pair AAT06018/19, and the fluorescein and |  |
| CC                       | tetramethylrhodamine labelled probe AAT06020. By transmitting an     |  |
| CC                       | excitation beam by a fibre optic into the vol. of the reaction mix.  |  |
| CC                       | via a coaxial lens, the 2 fluorescent indicators generate signals    |  |
| CC                       | proportional to the amount of amplification prod. and vol. of        |  |
| CC                       | reaction mix.. This property can be used to measure, in real time,   |  |
| CC                       | the polynucleotide prods. from the nucleic acid amplification        |  |
| CC                       | process.   |  |
| XX                       |  |  |
| SQ                       | Sequence 26 BP; 3 A; 13 C; 4 G; 6 T; 0 other;                        |  |
| Query Match              | 74.0%; Score 14.8; DB 16; Length 26;                                 |  |
| Best Local Similarity    | 88.9%; Pred. No. 3.8e+04;  |  |
| Matches 16; Conservative | 0; Mismatches 2; Indels 0; Gaps                                      |  |
| QY                       | 2 AGGAGGATGAGGGGAGG 19   |  |
|                          |  |  |
| DB                       | 22 AGCATGGGATGAGGGGAGG 5   |  |
| RESULT 13                |  |  |
| AAT43558/c               |  |  |
| ID                       | AAT43558 standard: DNA: 26 BP.                                       |  |
| XX                       |  |  |
| AC                       | AAT43558;  |  |
| XX                       |  |  |
| DI                       | 18-JUL-1997 (first entry)  |  |
| XX                       |  |  |
| DE                       | Fluorescein-labelled probe used for combined amplification/detection |  |
| XX                       |  |  |
| KW                       | Probe; hybridisation; PCR; polymerase chain reaction; primer;        |  |
| KW                       | amplification; detection; labelled; fluorescence; quencher;          |  |
| KW                       | rhodamine; SS.   |  |
| XX                       |  |  |
| OS                       | Synthetic.   |  |
| XX                       |  |  |
| Key                      | Location/Qualifiers  |  |
| PT                       | misc_feature 1   |  |
| FT                       | /tag= a  |  |
| FT                       | /note= "labelled with 6-carboxyfluorescein"                          |  |
| XX                       |  |  |
| PN                       | W09634983-A1.  |  |
| XX                       |  |  |
| PD                       | 07-NOV-1996.   |  |
| XX                       |  |  |
| XX                       |  |  |
| PF                       | 05-APR-1996; 96WO-US04693.   |  |
| XX                       |  |  |
| PR                       | 05-MAY-1995; 95US-0435509.   |  |
| XX                       |  |  |
| PA                       | (PERKIN-ELMER CORP.  |  |
| XX                       |  |  |
| PI                       | Mayland PE;  |  |
| XX                       |  |  |
| DR                       | W01; 1996-506182/50.   |  |
| XX                       |  |  |
| PT                       | Oligonucleotide probe for combined amplification and hybridisation   |  |
| PT                       | process - has fluorescer mol. at one end with quenching mol. at the  |  |
| PT                       | other end and is used in absence of 5' to 3' exonuclease activity    |  |
| XX                       |  |  |
| XX                       | Claim 1; Page 16; 24pp; English.                                     |  |
| XX                       |  |  |
| CC                       | AAT4358-143561 are random oligonucleotide probes capable of hybrid   |  |
| CC                       | to a target polynucleotide (PN). They have a fluorescer molecule (FM |  |
| CC                       | attached to their 5'-ends and a quencher molecule (QM) attached to t |  |
| CC                       | other end, such that the QM quenches the fluorescence of the FM when |  |
| CC                       | the probe is in a single-stranded state. The fluorescer stays unquen |  |

CC when the probe is in a double stranded state (i.e. hybridised to  
 CC its target). The probes also have 5'-modifications, e.g.  
 CC phosphoramidite bonds, to render them impervious to digestion by the  
 CC 5' to 3' exonuclease activity of a polymerase. The probes are used in  
 CC a combined PCR amplification and hybridisation probing method.  
 CC using the method combined amplification and hybridisation probe  
 CC detection of amplified nucleic acid target sequence can be carried out  
 CC in a single reaction vessel using a single reagent. Also, amplification  
 CC and probing steps are performed in a combined manner such that no  
 CC reagent additions are required subsequent to the amplification step.  
 XX  
 SS Sequence 26 BP: 3 A: 14 C: 4 G: 6 T: 0 other:

Query Match 74.0% Score 14.8; DB 17; Length 26;  
 Best Local Similarity 88.9%; Prod. No. 5,80004;  
 Matches 16; Conservation 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGAGGAGGATGGGAGGAG 19

DB 111 TTTTTTTTTTTT 5

#### RESULT 14

AA12422/c  
 ID AA12422 standard; DNA: 26 BP.

AC AA12422;

DI 09 JAN 1997 (first entry)

DE Probe AL.

XX Primer: Probe; target sequence; nucleic acid amplification;  
 KW polymerase; fluorescent reporter molecule; quencher molecule; ss.  
 KW  
 CS Synthetic.

XX Key Location/Qualifiers  
 FH modified base 2  
 FT /\*tag a  
 FT /\*tag a  
 FT modified base 7  
 FT /\*tag b  
 FT /\*tag b  
 FT modified base 14  
 FT /\*tag c  
 FT /\*tag c  
 FT modified base 19  
 FT /\*tag d  
 FT /\*tag d  
 FT modified base 22  
 FT /\*tag e  
 FT /\*tag e  
 FT modified base 26  
 FT /\*tag f  
 FT /\*tag f  
 FT modified by phosphatase (KIM) \*

W09615270 AL.

21 MAY 1996.

15 NOV 1995; 94WO 0514882.

16 NOV 1994; 94US 0340568.

(PEKE) PERKIN ELMER CORP.

Flood SJA, Livak KJ, Matamoro J, Mullah KB;

WPT; 1996 259863/26.

PT Self-quenching fluorescent oligonucleotide probe useful to, e.g.,  
 43 monitor nucleic acid amplification reactions

XX Example; Page 22; 61pp; English.  
 PS  
 XX  
 CC The sequences given in AA12422-27 represent primers, probes and  
 CC target sequences used in the method of the invention for monitoring  
 CC nucleic acid amplification. The method comprises performing nucleic  
 CC acid amplification using a polymerase having 5'-3' nuclease activity,  
 CC a primer capable of hybridising to the target polynucleotide and an  
 CC oligonucleotide probe capable of hybridising to the target sequence  
 CC 3' relative to the primer. The probe has a fluorescent reporter  
 CC molecule and a quencher molecule capable of quenching the fluorescence  
 CC of the reporter molecule. The probe exists in at least one stable  
 CC stranded (ss) conformation when hybridised where the quencher  
 CC molecule quenches the fluorescence of the reporter molecule. The probe  
 CC exists in at least one conformation when hybridised to the target  
 CC sequence where the fluorescence of the reporter molecule is unquenched.  
 CC The fluorescent intensity of the reporter molecule being greater than  
 CC the fluorescent intensity of the quencher molecule when the probe is  
 CC hybridised to the target sequence. The polymerase digests the probe  
 CC during amplification to separate the reporter molecule from the quencher  
 CC molecule. The generation of fluorescence corresponds to the occurrence  
 CC of nucleic acid amplification.

SS Sequence 26 BP: 3 A: 14 C: 4 G: 6 T: 0 other:

Query Match 74.0% Score 14.8; DB 17; Length 26;  
 Best Local Similarity 88.9%; Prod. No. 5,80004;

Matches 16; Conservation 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGAGGAGGATGGGAGGAG 19

DB 111 TTTTTTTTTTTT 5

#### RESULT 15

AA194058/c  
 ID AA194058 standard; DNA: 26 BP.

AC AA194058;

DI 06 MAY 1998 (first entry)

DE Capture probe 1 for a portion of the human beta actin gene.

XX Target sequence; detection; hybridisation platform; capture probe;  
 KW signal-amplified system; biological fluid; forensic sample;  
 KW beta actin gene; ss.

XX Synthetic.

CS Homo sapiens.

FN W09741256 AL.

10 06 NOV 1997.

XX 25 APR 1997; 97WO 0307014.

XX 26 APR 1996; 96US 0639224.

XX (ALICE) ALICE 11 ALICE.

XX Bodma SK, Chittino TL, Strabados FN, Solomon NA;

XX WPT; 1997 549752/70.

XX detecting several nucleic acid targets by hybridisation to  
 FI immobilised, labelled probes - uses same labelled system for all  
 FI assays, e.g. in diagnosis or forensic studies

PS Example 1; Page 21; 26pp; English.

XX Capture probes AA194058-59 were used to detect a portion of the human  
 CC beta actin gene (AA194060). The probes are labelled with a

CC 3' terminal thiol complex, polyethylene oxide spacer, fluorescein  
 CC sequence, or a 3'-pyrene nucleoside phosphoramidite. The probes are used  
 CC to exemplify the method of the invention. The method, which detects  
 CC several target sequences, comprises applying a sample to a hybridisation  
 CC platform which has at least 2 capture probes (AA193058-59) immobilised in  
 CC a defined pattern. Each of the capture probes has a distinctive sequence,  
 CC and is labelled with at least one member of a signal-generating system.  
 CC Hybridisation of any target sequence to the probes at a particular site  
 CC results in a detectable change in the signal from that site. The method  
 CC is used to detect nucleic acids in biological fluids or in forensic  
 CC samples.

XX  
 SQ Sequence 26 BP; 3 A; 13 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 18; Length 26;  
 Best local Similarity 88.9%; Pred. No. 3.8e+04;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGAGGACATGGGGAGG 19  
 III IIIIIIIIIII  
 DB 22 AGGATGGACATGGGGAGG 5

RESULT 1:  
 AAV16.266/c  
 ID AAV16.266 standard; DNA: 26 BP.  
 AC AAV16.266;

DI 01-JUN-1998 (first entry)

XX Dual labeled fluorescein/rhodamin probe.

XX Probe: fluorescent label: acceptor fluorophore;

KW fluorescein; donor fluorophore: Cy5; Cy5.5; light excitation;

KW fluorescence energy transfer pair; detection: heterozygosity;

KW factor V Leiden; mutation; amplification; concentration; SS.

XX Synthetic.

XX Key Location/Qualifiers

PH modified\_base 1

FT /\*tag= a

FT /label= Fluorescein

FT modified\_base 7

FT /\*tag= b

FT /label= Rhodamine

FT /note= "attached by an amino-linker arm"

XX W09746714 A1.

PN 11 DEC 1997.

PD 04 JUN-1997; 97W0-0S10008.

PE 17 MAR-1997; 97US-0818267.

PF 04 JUN-1996; 96US-0658994.

PG (UNAB ) UNIV UTAH RES FOUND.

PH Rasmussen RP, Kirio KM, Wittwer CT.

XX WPT: 1998 042220/04.

XX Analysing target DNA in presence of two fluorophore labelled probes

XX - useful for real time monitoring of polymerase chain reaction,

XX detecting heterozygosity, determining PCR completion, etc

XX Example 4; Page 69; 217pp; English.

XX The present probe is a dual labeled probe (see features). the potential

CC signal from the fluorescein/Cy5 pair (AAV16.265) was compared with the

CC signal from a fluorescein/rhodamine pair (present probe), and found

CC to be 10 fold higher. The probes are used to exemplify the method  
 CC of the invention which is used to analyse a target DNA sequence. The  
 CC method comprises amplifying the target sequence by PCR in the presence  
 CC of two nucleic acid probes that hybridise to adjacent regions of the  
 CC target sequence, one of the probes being labelled with an acceptor  
 CC fluorophore (preferably fluorescein) and the other with a donor  
 CC fluorophore (preferably Cy5 or Cy5.5). Upon hybridisation the donor and  
 CC acceptor fluorophores are within 25 nucleotides of one another. The  
 CC sample containing the target sequence is excited with light at a wave  
 CC length absorbed by the donor fluorophore, and the emission from the  
 CC fluorescence energy transfer pair is detected, preferably by monitoring  
 CC the temperature dependent fluorescence. The method is used to detect  
 CC differences, e.g. heterozygosity, between nucleotides at selected loci,  
 CC especially in the detection of a factor V Leiden mutation in an  
 CC individual. The method can also be used to monitor amplification and  
 CC determine the concentration of an amplified product or to quantify the  
 CC initial copy number of the target sequence in the sample.

XX  
 SQ Sequence 26 BP; 3 A; 13 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 19; Length 26;  
 Best local Similarity 88.9%; Pred. No. 3.8e+04;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGAGGACATGGGGAGG 19  
 III IIIIIIIIIII  
 DB 22 AGGATGGACATGGGGAGG 5

RESULT 1/  
 AAV15.428/c  
 ID AAV15.428 standard; DNA: 26 BP.  
 AC AAV15.428;

DI 28-MAY-1998 (first entry)

XX Human actin probe SEQ ID NO:3.

XX Human; actin; probe; hybridisation; amplification; reagent composition;  
 KW detection; fluorophore: SS.

XX Synthetic.

OS Homo sapiens.

XX Key Location/Qualifiers

PH modified\_base 1

FT /\*tag= a

FT /label= FAM

FT /note= "FAM indicates a fluorescein molecule coupled to

FT the oligonucleotide by reacting an NHS-ester

FT group attached to the fluorescein's 6 carbon

FT with a 5'-aminophosphate attached to the

FT 5' terminal deoxyadenosine of the

FT oligonucleotide"

FT modified\_base 7

FT /\*tag= b

FT /label= IMR

FT /note= "IMR indicates a tetramethylrhodamine molecule

FT coupled to the base moiety of the adjacent

FT thymidine"

XX W09746708 A1.

XX 11 DEC 1997.

XX 04-JUN-1997; 97W0-0S09648.

XX 04-JUN-1996; 96US-0657489.

XX (WKE ) PERKIN ELMER CORP.

XX Liver KJ. Methylide L3;

XX  
DE WPT: 1998 042214/04.  
XX  
PT Recent composition for detection of nucleic acid amplification  
PT products includes internal reference molecule comprising 1st and  
XX 2nd fluorophores joined by oligonucleotide backbone connector  
XX  
PS Example: Page 17; 4pp; English.  
XX  
CC The present sequence represents a probe for human actin used in the  
CC example of the present invention. The present invention describes: (1)  
CC a reagent composition comprising a nucleic acid amplification buffer and  
CC an internal reference molecule (1), comprising a 1st and 2nd fluorophore  
CC and a backbone connector that does not hybridise in a sequence specific  
CC manner to a polynucleotide for amplification under nucleic acid  
CC amplification conditions, where the backbone connector joins the 2  
CC fluorophores so as to permit energy transfer from the 1st to 2nd; and (2)  
CC measuring the amount of an amplification product of a polynucleotide for  
CC amplification in a nucleic acid amplification reaction, comprising  
CC adding (1) to the amplification reaction. (1) can be used to quantify  
CC the formation of amplification products in nucleic acid amplification  
CC reactions, and monitor, in real time, the progress of a nucleic acid  
CC amplification reaction. The fluorescent reagents can generate a stable  
CC fluorescent signal proportional to the amount of amplification product,  
CC which is independent of variations in the volume of the reaction  
CC mixture. The level of fluorescent signal from (1) remains constant  
CC throughout a fluorescent-quencher probe assay. (1) allows multiple  
CC fluorescent-quencher probes to be used in a single amplification  
CC reaction.  
XX  
SQ Sequence 26 BP; 3 A; 13 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 19; Length 26;  
Best Local Similarity 88.9%; Pred. No. 3,80004;  
Matches 16; Conservatize 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGAGGATGAGGAGG 19  
111 11111111111  
1b 22 AGGATGGATGAGGAGG 5

RESULT 18  
AAAG0480/-  
1b AAAG0480 standard; DNA; 26 BP.  
XX  
AC AAAG0480;  
XX  
1b 10 JAN 2001 (first entry)  
XX  
DE Labeled SGL oligonucleotide.  
XX  
KW SGL oligonucleotide; phosphoramidite oligonucleotide;  
KW Labeled oligonucleotide; solid support; ss.  
XX  
OS Synthetic.

Key Location/Qualifiers  
FT modified\_base 1 /\*tag a  
FT /note "5' end is conjugated to a NER moiety via either  
FT an amino group or a phosphate group"  
FT modified\_base 1..26  
FT /\*tag b  
FT /note "Phosphoramidate linkages"

PN W0200050442 A2.  
XX  
XX 31 APR 2000.  
XX  
XX 18 FEB 2000; 2000W0 US04214.  
XX  
XX 22 FEB 1999; 9905 0256440.  
XX

PA (PERKIN ELMER CORP.  
XX  
P1 Vinayak RS, Lee JS, Mullaly KB, Rosenblum BB;  
XX  
DE WPT: 2000 022005/03.  
XX  
P1 Synthesis of labeled oligonucleotides uses a labeled solid support  
P1 structure.  
XX  
PS Example 5; Page 21; 4pp; English.  
XX  
CC The invention relates to a novel method of synthesizing labeled  
CC oligonucleotides. The method comprises reacting a labeled solid support  
CC with acid to remove the acid cleavable protecting group and then adding  
CC a 5' phosphoramidite, 4' protected nucleoside and an activator to form a  
CC bond between the labeled solid support and the nucleoside. The method  
CC is used to rapidly and economically synthesise labeled oligonucleotides  
CC on solid supports under conditions which are compatible with chemically  
CC labile functionality. The present sequence represents an oligonucleotide  
CC synthesised in an exemplification according to the method of the  
CC invention.

SQ Sequence 26 BP; 3 A; 13 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 21; Length 26;  
Best Local Similarity 88.9%; Pred. No. 3,80004;  
Matches 16; Conservatize 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGAGGATGAGGAGG 19  
111 11111111111  
1b 22 AGGATGGATGAGGAGG 5

RESULT 19  
AAST1184/-  
1b AAST1184 standard; DNA; 26 BP.  
XX  
AC AAST1184;  
XX

1b 24 OCT 2001 (first entry)

XX Human beta globin internal probe #1.

XX Beta globin; human; probe; nucleic acid quantification; ss.

XX Homo sapiens.

Key Location/Qualifiers  
FT modified\_base 1 /\*tag a  
FT /note "5' end is conjugated to a NER moiety via either  
FT an amino group or a phosphate group"  
FT modified\_base 2 /\*tag b  
FT /note "Phosphoramidate linkages"  
FT modified\_base 1  
FT /note "Phosphoramidate linkages"

PN US6292079 B1.

XX 15 MAY 2001.

XX 09 APR 2000; 2000RS 0635444.

XX 04 JUN 1997; 9703 0060276.

XX 04 JUN 1996; 9603 0058994.

XX 17 MAR 1997; 9703 0018267.

XX (UIAH) UNIV UTAH RES FOUND.

XX Willet et al, PCT/KR, Publication No.

XX WPT: 2001 030078/03.

XX



PT Quantitation of amplified product in polymerase chain reaction by  
 PT determining rate constant for known concentrations of product, rate of  
 PT annealing of unknown concentrations of product and quantifying from the  
 PT two  
 XX  
 PS Example 4: Column 28; 87pp; English.  
 XX  
 CC The invention relates to a method for determining the concentration of an  
 CC amplified product (AP) in a selected PCR (polymerase chain reaction)  
 CC mixture, determining concentration of an amplified product (AP) in a  
 CC selected PCR mixture, comprises determining second order rate constant  
 CC for AP at selected temperature and reaction conditions by monitoring rate  
 CC of hybridisation of known concentration of AP, determining rate of  
 CC annealing for an unknown concentration of AP and calculating AP  
 CC concentration from rate of annealing and second order rate constant. The  
 CC method is useful for determining the concentration of a nucleic acid  
 CC product amplified by PCR. The present sequence represents the human  
 CC beta globin internal probe #7 used in an example which demonstrates  
 CC the method of the invention.  
 XX

Sequence 26 BP; 4 A; 13 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 22; Length 26;

Best Local Similarity 88.9%; Pred. No. 4.8e-03; Length 26;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGAGGATGAGGAGG 19

III IIIIIIIIIII

Db 22 AGGATGGATGAGGAGG 5

RESULT 23

AAH45994/

Id AAH45994 standard; DNA; 26 BP.

XX AAH45994;

XX 11 SEP-2001 (first entry)

XX Human beta-globin fragment PCR probe 7.

XX Human; beta-globin; PCR primer; detection; hybridisation;

XX fluorescence resonance energy transfer pair; fluorescein; Cy5;

XX probe; quantification; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1

FT /\*taq\_a

FT /mod\_base OTHER

FT /note "fluorescein label"

FT modified\_base 7

FT /\*taq\_b

FT /mod\_base OTHER

FT /note "rhodamine label attached by a linker arm"

FT modified\_base 26

FT /\*taq\_c

FT /mod\_base OTHER

FT /note "chemical phosphorylation agent"

XX US-24'514 B1.

XX 12 JUN-2001.

XX 17 SEP-1999;

XX 99US-0498629.

XX 04 JUN-1997;

XX 97US-0869276.

XX 04 JUN-1996;

XX 96US-0658994.

XX 17 MAR-1997;

XX 97US-0818267.

XX (UIAH ) UNIV UTAH RES FOUND.

XX Wittwer CL, Kittle KM, Rasmussen RP;

XX DR 2001-217674/22.

Modification hybridization or amplification of DNA during polymerase

Wittwer CL;

XX WPI; 2001-416409/44.

XX

PI New fluorescence energy transfer pair with first and second probes

XX labelled with fluorescein and Cy5 or Cy5.5, respectively, useful for

PI detecting target analyte and for continuous fluorescence monitoring of

XX DNA amplification

XX

PS Example 4: Column 27; 87pp; English.

XX

CC The present sequence is that of a PCR probe for the human beta-globulin,

CC useful to the invention. The invention relates to fluorescence resonance

CC energy transfer pairs for detecting the presence of a target analyte.

CC the pair comprises a first probe labelled with fluorescein and a second

CC probe labelled with Cy5 or Cy5.5. In the presence of the target analyte,

CC the probes are positioned so that the fluorescein and Cy5 or Cy5.5 are

CC in a fluorescence resonance energy transfer relationship. The

CC fluorescence energy transfer pair is useful for observing hybridisation

CC with fluorescence during and/or immediately after PCR. Thus, the

CC fluorescence resonance energy transfer pair is useful for continuous

CC fluorescence monitoring of DNA amplification. The information obtained

CC from these observations is useful for product identification, sequence

CC alteration detection and quantification. The present method allows

CC monitoring of hybridisation during PCR and analysing the reaction while

CC it is taking place, i.e., during or immediately after temperature cycling

CC without manipulation of the sample.

XX

Sequence 26 BP; 4 A; 13 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 22; Length 26;

Best Local Similarity 88.9%; Pred. No. 4.8e-03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGAGGATGAGGAGG 19

III IIIIIIIIIII

Db 22 AGGATGGATGAGGAGG 5

RESULT 21

AAH59150/

Id AAF59150 standard; DNA; 26 BP.

XX AAF59150;

XX

DT 24 APR-2001 (first entry)

XX

DE Total-labeled fluorescein/rhodamine probe SEQ ID NO:20.

XX

XX Human; beta-globin; hybridisation; probe; PCR primer; fluorescence;

XX rapid thermal cycling; fluorescence resonance energy transfer; MBEK;

XX quantification; modification; reannealing; hepatitis B surface antigen;

XX methylated rDNA; nucleic acid; reduction; prostate specific antigen;

XX amplification; detection; ss.

XX Synthetic.

XX

XX US6174670-B1.

XX

PD 16 JAN-2001.

XX

PF 04 JUN-1997;

XX 97US-0869276.

XX

PF 04 JUN-1996;

XX 96US-0658994.

XX

PF 17 MAR-1997;

XX 97US-0818267.

XX

PA (UIAH ) UNIV UTAH RES FOUND.

XX

PI Wittwer CL, Kittle KM, Rasmussen RP;

XX

XX DR 2001-217674/22.

XX

PI Modification hybridization or amplification of DNA during polymerase



PI intersect in 2 gene showing different expression particularly  
 XX significant increase in eosinophils in patients -

PS disclosure; Page 58; 90pp; Japanese.

XX The present invention relates to a method for examining allergic diseases  
 CC with intersect in 2 gene or a gene with equivalent function of intersect  
 CC 2 as an indicator gene, which comprises determining the expression level  
 CC of the gene in the eosinophils in a patient, and comparing the expression  
 CC level with that in the eosinophils of a healthy individual. The method is  
 CC for examining allergic diseases, particularly atopic dermatitis, which is  
 CC also applicable in screening candidate compounds for remedies. The  
 CC present sequence is a probe described in the exemplification of the  
 XX invention.

XX Sequence 26 BP; 3 A; 14 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 24; Length 26;  
 Best Local Similarity 88.9%; Prod. No. 3,80003;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGCGGATCGGGAGG 19

DB 22 AGATGGATCGGGAGG 5

RESULT 34

ABK52496/c

ID ABK52496 standard; DNA; 26 BP.

XX AC ABK52496;

XX 14 AUG 2002 (first entry)

XX Fluorescent probe for DNA encoding human beta-actin.

XX Human; detection of early stage allergic disease; atopic dermatitis;  
 XX anti-allergic; eosinocyte; eosinophil; beta actin; probe; ss.

XX Homo sapiens.

PH Key Location/Qualifiers

FT modified\_base 1

FT /\*taq a

FT /mod\_base OTHER

FT /note OTHER labelled with FAM

FT modified\_base 7

FT /\*taq b

FT /mod\_base OTHER

FT /note OTHER labelled with FAMRA

FT modified\_base 26

FT /\*taq c

FT /mod\_base OTHER

FT /note OTHER modified with 4'phosphate

PN JP2002119281 A.

XX 24 APR 2002.

XX 11 OCT 2000; 2000JP-0311194.

XX 11 OCT 2000; 2000JP-0311194.

XX (GENO-) GENO-X SOYAKU KENKYUSHO KK.

XX (KOKU-) KOKURITSU SHOKI BYOIN INC-00.

XX WPI; 2002-475427/51.

XX Detecting early stage allergic diseases with markers of 7 genes of

PI GM-CSF R-beta, GM-CSF R-alpha, IL-3 R-alpha, PAF R, bcl-2, bcl-x and

PI cld4 in eosinophils

XX

PS

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

Example 1; Page 12; 25pp; Japanese.

XX the present invention relates to a method for detecting early stage  
 XX allergic diseases, particularly atopic dermatitis. The method  
 CC comprises determining the expression levels of granulocyte macrophage  
 CC colony stimulating factor receptor alpha or beta (GM-CSF R-alpha  
 CC or beta), interleukin 3 receptor alpha (IL-3 R-alpha), bcl-2,  
 CC bcl-x, platelet activation factor receptor (PAF R) or CD44 in  
 CC eosinocytes of a subject to be tested. The method further comprises  
 CC comparison with expression levels in healthy volunteers. The method  
 CC is useful for the early diagnosis and treatment of early stage  
 CC allergic diseases such as atopic dermatitis. The present sequence  
 CC represents a probe for DNA encoding beta-actin (used as a control)  
 CC in the methods of the present invention.

XX Sequence 26 BP; 3 A; 14 C; 4 G; 6 T; 0 other;

Query Match 74.0%; Score 14.8; DB 24; Length 26;

Best Local Similarity 88.9%; Prod. No. 3,80003;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGCGGATCGGGAGG 19

DB 22 AGATGGATCGGGAGG 5

RESULT 25

ABK59047/c

ID ABK59047 standard; DNA; 26 BP.

XX AC ABK59047;

XX 20 AUG 2002 (first entry)

XX Nucleotide sequence of a primer.

XX Human; allergosis; eosinophil; primer; ss.

XX Homo sapiens.

PH Key Location/Qualifiers

FT modified\_base 1

FT /\*taq a

FT /note "6-carboxy-fluorescein attached"

FT modified\_base 7

FT /\*taq b

FT /note "6-carboxy-N,N,N',N'-tetramethylrhodamine attached"

FT modified\_base 26

FT /\*taq c

FT /note "6-carboxy-N,N,N',N'-tetramethylrhodamine attached"

PN JP2002045500 A.

XX 02 APR 2002.

XX 25 SEP 2000; 2000JP-0291416.

XX 25 SEP 2000; 2000JP-0291416.

XX (GENO-) GENO-X SOYAKU KENKYUSHO KK.

XX (KOKU-) KOKURITSU SHOKI BYOIN INC-00.

XX WPI; 2002 439994/47.

XX Examining allergosis, involves measuring the expression levels of a

PI Specific gene, and comparing it to the levels in the eosinophils of a

PI healthy control

XX Example 1; Page 14; 20pp; Japanese.

XX The specification describes a method for examining allergosis. The

CC method comprises measuring the expression level of the gene given

CC in ABK59047, and comparing it with the expression level of the gene

CC in the eosinophils of a healthy person. The method is used for the

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC examination of alleles. The present sequence represents a  
CC primer, which is used in the course of the invention.

XX

SQ Sequence 26 BP; 3 A; 13 C; 4 G; 6 T; 0 other;

Query Match

74.0%; Score 14.8; DB 24; Length 26;

Best Local Similarity 86.9%; Pred. No. 3,8004;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AAGGAGGATGGGGAGG 19

111 111111111111

DB 22 AAGAGGATGGGGAGG 5

Search Completed: March 18, 2003, 11:01:29  
Job time : 115.82 secs



|     |      |      |    |   |                   |                   |     |      |      |    |   |                   |                   |
|-----|------|------|----|---|-------------------|-------------------|-----|------|------|----|---|-------------------|-------------------|
| 101 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-542 | Sequence 542, App | 174 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-508 | Sequence 508, App |
| 102 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-548 | Sequence 548, App | 175 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-612 | Sequence 612, App |
| 103 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-593 | Sequence 593, App | 176 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-635 | Sequence 635, App |
| 104 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-617 | Sequence 617, App | 177 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-657 | Sequence 657, App |
| 105 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-640 | Sequence 640, App | 178 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-930 | Sequence 930, App |
| 106 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-662 | Sequence 662, App | 179 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-257 | Sequence 257, App |
| 107 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-683 | Sequence 683, App | 180 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-292 | Sequence 292, App |
| 108 | 14.4 | 72.0 | 26 | 3 | US-08-757-024-703 | Sequence 703, App | 181 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-426 | Sequence 426, App |
| 109 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-427 | Sequence 427, App | 182 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-459 | Sequence 459, App |
| 110 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-457 | Sequence 457, App | 183 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-491 | Sequence 491, App |
| 111 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-486 | Sequence 486, App | 184 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-422 | Sequence 422, App |
| 112 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-514 | Sequence 514, App | 185 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-452 | Sequence 452, App |
| 113 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-541 | Sequence 541, App | 186 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-481 | Sequence 481, App |
| 114 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-567 | Sequence 567, App | 187 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-509 | Sequence 509, App |
| 115 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-592 | Sequence 592, App | 188 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-536 | Sequence 536, App |
| 116 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-616 | Sequence 616, App | 189 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-562 | Sequence 562, App |
| 117 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-639 | Sequence 639, App | 190 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-587 | Sequence 587, App |
| 118 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-661 | Sequence 661, App | 191 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-611 | Sequence 611, App |
| 119 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-682 | Sequence 682, App | 192 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-634 | Sequence 634, App |
| 120 | 14.4 | 72.0 | 27 | 3 | US-08-757-024-702 | Sequence 702, App | 193 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-929 | Sequence 929, App |
| 121 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-395 | Sequence 395, App | 194 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-220 | Sequence 220, App |
| 122 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-426 | Sequence 426, App | 195 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-254 | Sequence 254, App |
| 123 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-456 | Sequence 456, App | 196 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-291 | Sequence 291, App |
| 124 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-485 | Sequence 485, App | 197 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-525 | Sequence 525, App |
| 125 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-513 | Sequence 513, App | 198 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-558 | Sequence 558, App |
| 126 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-540 | Sequence 540, App | 199 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-590 | Sequence 590, App |
| 127 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-566 | Sequence 566, App | 200 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-621 | Sequence 621, App |
| 128 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-591 | Sequence 591, App | 201 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-651 | Sequence 651, App |
| 129 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-615 | Sequence 615, App | 202 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-680 | Sequence 680, App |
| 130 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-638 | Sequence 638, App | 203 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-708 | Sequence 708, App |
| 131 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-660 | Sequence 660, App | 204 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-535 | Sequence 535, App |
| 132 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-681 | Sequence 681, App | 205 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-561 | Sequence 561, App |
| 133 | 14.4 | 72.0 | 28 | 3 | US-08-757-024-701 | Sequence 701, App | 206 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-586 | Sequence 586, App |
| 134 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-362 | Sequence 362, App | 207 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-610 | Sequence 610, App |
| 135 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-394 | Sequence 394, App | 208 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-928 | Sequence 928, App |
| 136 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-425 | Sequence 425, App | 209 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-182 | Sequence 182, App |
| 137 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-455 | Sequence 455, App | 210 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-219 | Sequence 219, App |
| 138 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-484 | Sequence 484, App | 211 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-255 | Sequence 255, App |
| 139 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-512 | Sequence 512, App | 212 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-290 | Sequence 290, App |
| 140 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-539 | Sequence 539, App | 213 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-324 | Sequence 324, App |
| 141 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-565 | Sequence 565, App | 214 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-357 | Sequence 357, App |
| 142 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-590 | Sequence 590, App | 215 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-389 | Sequence 389, App |
| 143 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-614 | Sequence 614, App | 216 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-420 | Sequence 420, App |
| 144 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-637 | Sequence 637, App | 217 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-450 | Sequence 450, App |
| 145 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-659 | Sequence 659, App | 218 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-479 | Sequence 479, App |
| 146 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-680 | Sequence 680, App | 219 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-507 | Sequence 507, App |
| 147 | 14.4 | 72.0 | 29 | 3 | US-08-757-024-700 | Sequence 700, App | 220 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-534 | Sequence 534, App |
| 148 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-932 | Sequence 932, App | 221 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-560 | Sequence 560, App |
| 149 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-428 | Sequence 428, App | 222 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-585 | Sequence 585, App |
| 150 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-461 | Sequence 461, App | 223 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-927 | Sequence 927, App |
| 151 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-493 | Sequence 493, App | 224 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-143 | Sequence 143, App |
| 152 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-424 | Sequence 424, App | 225 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-181 | Sequence 181, App |
| 153 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-454 | Sequence 454, App | 226 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-218 | Sequence 218, App |
| 154 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-483 | Sequence 483, App | 227 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-254 | Sequence 254, App |
| 155 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-511 | Sequence 511, App | 228 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-289 | Sequence 289, App |
| 156 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-538 | Sequence 538, App | 229 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-323 | Sequence 323, App |
| 157 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-564 | Sequence 564, App | 230 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-356 | Sequence 356, App |
| 158 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-589 | Sequence 589, App | 231 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-388 | Sequence 388, App |
| 159 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-613 | Sequence 613, App | 232 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-419 | Sequence 419, App |
| 160 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-636 | Sequence 636, App | 233 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-449 | Sequence 449, App |
| 161 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-658 | Sequence 658, App | 234 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-478 | Sequence 478, App |
| 162 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-679 | Sequence 679, App | 235 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-506 | Sequence 506, App |
| 163 | 14.4 | 72.0 | 30 | 3 | US-08-757-024-931 | Sequence 931, App | 236 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-533 | Sequence 533, App |
| 164 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-293 | Sequence 293, App | 237 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-519 | Sequence 519, App |
| 165 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-327 | Sequence 327, App | 238 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-365 | Sequence 365, App |
| 166 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-360 | Sequence 360, App | 239 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-103 | Sequence 103, App |
| 167 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-392 | Sequence 392, App | 240 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-142 | Sequence 142, App |
| 168 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-423 | Sequence 423, App | 241 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-180 | Sequence 180, App |
| 169 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-453 | Sequence 453, App | 242 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-217 | Sequence 217, App |
| 170 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-482 | Sequence 482, App | 243 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-253 | Sequence 253, App |
| 171 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-510 | Sequence 510, App | 244 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-288 | Sequence 288, App |
| 172 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-537 | Sequence 537, App | 245 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-322 | Sequence 322, App |
| 173 | 14.4 | 72.0 | 31 | 3 | US-08-757-024-563 | Sequence 563, App | 246 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-355 | Sequence 355, App |

|     |      |      |    |   |                   |                   |     |      |      |    |   |                   |                   |
|-----|------|------|----|---|-------------------|-------------------|-----|------|------|----|---|-------------------|-------------------|
| 247 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-187 | Sequence 387, App | 320 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-350 | Sequence 350, App |
| 248 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-118 | Sequence 418, App | 321 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-382 | Sequence 382, App |
| 249 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-448 | Sequence 448, App | 322 | 14.4 | 72.0 | 41 | 3 | US-08-757-024-920 | Sequence 920, App |
| 250 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-477 | Sequence 477, App | 323 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-16  | Sequence 16, App  |
| 251 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-505 | Sequence 505, App | 324 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-57  | Sequence 57, App  |
| 252 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-532 | Sequence 532, App | 325 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-97  | Sequence 97, App  |
| 253 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-925 | Sequence 925, App | 326 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-136 | Sequence 136, App |
| 254 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-926 | Sequence 926, App | 327 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-174 | Sequence 174, App |
| 255 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-102 | Sequence 102, App | 328 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-211 | Sequence 211, App |
| 256 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-141 | Sequence 141, App | 329 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-247 | Sequence 247, App |
| 257 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-179 | Sequence 179, App | 330 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-282 | Sequence 282, App |
| 258 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-216 | Sequence 216, App | 331 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-316 | Sequence 316, App |
| 259 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-252 | Sequence 252, App | 332 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-349 | Sequence 349, App |
| 260 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-287 | Sequence 287, App | 333 | 14.4 | 72.0 | 42 | 3 | US-08-757-024-919 | Sequence 919, App |
| 261 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-321 | Sequence 321, App | 334 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-915 | Sequence 915, App |
| 262 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-354 | Sequence 354, App | 335 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-56  | Sequence 56, App  |
| 263 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-386 | Sequence 386, App | 336 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-56  | Sequence 56, App  |
| 264 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-417 | Sequence 417, App | 337 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-96  | Sequence 96, App  |
| 265 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-447 | Sequence 447, App | 338 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-135 | Sequence 135, App |
| 266 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-476 | Sequence 476, App | 339 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-173 | Sequence 173, App |
| 267 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-504 | Sequence 504, App | 340 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-210 | Sequence 210, App |
| 268 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-924 | Sequence 924, App | 341 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-246 | Sequence 246, App |
| 269 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-20  | Sequence 20, App  | 342 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-281 | Sequence 281, App |
| 270 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-61  | Sequence 61, App  | 343 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-315 | Sequence 315, App |
| 271 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-101 | Sequence 101, App | 344 | 14.4 | 72.0 | 43 | 3 | US-08-757-024-918 | Sequence 918, App |
| 272 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-140 | Sequence 140, App | 345 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-14  | Sequence 14, App  |
| 273 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-178 | Sequence 178, App | 346 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-55  | Sequence 55, App  |
| 274 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-215 | Sequence 215, App | 347 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-95  | Sequence 95, App  |
| 275 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-251 | Sequence 251, App | 348 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-134 | Sequence 134, App |
| 276 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-286 | Sequence 286, App | 349 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-172 | Sequence 172, App |
| 277 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-320 | Sequence 320, App | 350 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-209 | Sequence 209, App |
| 278 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-353 | Sequence 353, App | 351 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-245 | Sequence 245, App |
| 279 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-385 | Sequence 385, App | 352 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-280 | Sequence 280, App |
| 280 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-416 | Sequence 416, App | 353 | 14.4 | 72.0 | 44 | 3 | US-08-757-024-917 | Sequence 917, App |
| 281 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-446 | Sequence 446, App | 354 | 14.4 | 72.0 | 45 | 3 | US-08-757-024-13  | Sequence 13, App  |
| 282 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-475 | Sequence 475, App | 355 | 14.4 | 72.0 | 45 | 3 | US-08-757-024-54  | Sequence 54, App  |
| 283 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-923 | Sequence 923, App | 356 | 14.4 | 72.0 | 45 | 3 | US-08-757-024-94  | Sequence 94, App  |
| 284 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-19  | Sequence 19, App  | 357 | 14.4 | 72.0 | 45 | 3 | US-08-757-024-133 | Sequence 133, App |
| 285 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-60  | Sequence 60, App  | 358 | 14.4 | 72.0 | 45 | 3 | US-08-757-024-171 | Sequence 171, App |
| 286 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-100 | Sequence 100, App | 359 | 14.4 | 72.0 | 45 | 3 | US-08-757-024-208 | Sequence 208, App |
| 287 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-139 | Sequence 139, App | 360 | 14.4 | 72.0 | 45 | 3 | US-08-757-024-244 | Sequence 244, App |
| 288 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-177 | Sequence 177, App | 361 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-916 | Sequence 916, App |
| 289 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-214 | Sequence 214, App | 362 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-12  | Sequence 12, App  |
| 290 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-250 | Sequence 250, App | 363 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-53  | Sequence 53, App  |
| 291 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-285 | Sequence 285, App | 364 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-93  | Sequence 93, App  |
| 292 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-319 | Sequence 319, App | 365 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-132 | Sequence 132, App |
| 293 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-352 | Sequence 352, App | 366 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-170 | Sequence 170, App |
| 294 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-384 | Sequence 384, App | 367 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-207 | Sequence 207, App |
| 295 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-415 | Sequence 415, App | 368 | 14.4 | 72.0 | 46 | 3 | US-08-757-024-915 | Sequence 915, App |
| 296 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-445 | Sequence 445, App | 369 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-11  | Sequence 11, App  |
| 297 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-922 | Sequence 922, App | 370 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-52  | Sequence 52, App  |
| 298 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-18  | Sequence 18, App  | 371 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-92  | Sequence 92, App  |
| 299 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-59  | Sequence 59, App  | 372 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-131 | Sequence 131, App |
| 300 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-99  | Sequence 99, App  | 373 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-169 | Sequence 169, App |
| 301 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-138 | Sequence 138, App | 374 | 14.4 | 72.0 | 47 | 3 | US-08-757-024-914 | Sequence 914, App |
| 302 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-176 | Sequence 176, App | 375 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-10  | Sequence 10, App  |
| 303 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-213 | Sequence 213, App | 376 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-51  | Sequence 51, App  |
| 304 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-249 | Sequence 249, App | 377 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-91  | Sequence 91, App  |
| 305 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-284 | Sequence 284, App | 378 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-130 | Sequence 130, App |
| 306 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-318 | Sequence 318, App | 379 | 14.4 | 72.0 | 48 | 3 | US-08-757-024-913 | Sequence 913, App |
| 307 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-351 | Sequence 351, App | 380 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-9   | Sequence 9, App   |
| 308 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-383 | Sequence 383, App | 381 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-50  | Sequence 50, App  |
| 309 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-414 | Sequence 414, App | 382 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-90  | Sequence 90, App  |
| 310 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-921 | Sequence 921, App | 383 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-912 | Sequence 912, App |
| 311 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-17  | Sequence 17, App  | 384 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-8   | Sequence 8, App   |
| 312 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-58  | Sequence 58, App  | 385 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-49  | Sequence 49, App  |
| 313 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-98  | Sequence 98, App  | 386 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-911 | Sequence 911, App |
| 314 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-147 | Sequence 147, App | 387 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-10  | Sequence 10, App  |
| 315 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-185 | Sequence 185, App | 388 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-51  | Sequence 51, App  |
| 316 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-212 | Sequence 212, App | 389 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-91  | Sequence 91, App  |
| 317 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-248 | Sequence 248, App | 390 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-130 | Sequence 130, App |
| 318 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-283 | Sequence 283, App | 391 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-913 | Sequence 913, App |
| 319 | 14.4 | 72.0 | 49 | 3 | US-08-757-024-417 | Sequence 417, App | 392 | 14.4 | 72.0 | 50 | 3 | US-08-757-024-9   | Sequence 9, App   |

|     |    |      |    |   |                   |                    |     |    |      |    |   |                    |                    |
|-----|----|------|----|---|-------------------|--------------------|-----|----|------|----|---|--------------------|--------------------|
| 494 | 14 | 70.0 | 15 | 1 | US-08-110-294A-2  | Sequence 2, Appl1  | 456 | 13 | 65.0 | 23 | 3 | US-08-757-024-450  | Sequence 406, Appl |
| 494 | 14 | 70.0 | 15 | 1 | US-08-110-294A-3  | Sequence 3, Appl1  | 467 | 13 | 65.0 | 25 | 3 | US-08-757-024-429  | Sequence 408, Appl |
| 495 | 14 | 70.0 | 15 | 2 | US-08-489-926-2   | Sequence 2, Appl1  | 468 | 13 | 65.0 | 25 | 3 | US-08-757-024-429  | Sequence 429, Appl |
| 496 | 14 | 70.0 | 15 | 2 | US-08-489-926-3   | Sequence 3, Appl1  | 469 | 13 | 65.0 | 26 | 3 | US-08-757-024-465  | Sequence 465, Appl |
| 497 | 14 | 70.0 | 15 | 5 | PC1-US95-05420-B  | Sequence 8, Appl1  | 470 | 13 | 65.0 | 26 | 3 | US-08-757-024-497  | Sequence 497, Appl |
| 498 | 14 | 70.0 | 15 | 5 | PC1-US95-05420-9  | Sequence 9, Appl1  | 471 | 13 | 65.0 | 27 | 3 | US-08-757-024-441  | Sequence 441, Appl |
| 499 | 13 | 69.0 | 26 | 2 | US-08-687-662A-3  | Sequence 3, Appl1  | 472 | 13 | 65.0 | 27 | 3 | US-08-757-024-464  | Sequence 464, Appl |
| 499 | 13 | 69.0 | 26 | 2 | US-08-747-536-9   | Sequence 9, Appl1  | 473 | 13 | 65.0 | 28 | 3 | US-08-757-024-496  | Sequence 496, Appl |
| 499 | 13 | 69.0 | 15 | 3 | US-08-757-024-714 | Sequence 714, Appl | 474 | 13 | 65.0 | 28 | 3 | US-08-757-024-430  | Sequence 430, Appl |
| 499 | 13 | 69.0 | 16 | 3 | US-08-757-024-743 | Sequence 743, Appl | 475 | 13 | 65.0 | 29 | 3 | US-08-757-024-260  | Sequence 260, Appl |
| 499 | 13 | 69.0 | 16 | 3 | US-08-757-024-693 | Sequence 693, Appl | 476 | 13 | 65.0 | 29 | 3 | US-08-757-024-295  | Sequence 295, Appl |
| 499 | 13 | 69.0 | 17 | 3 | US-08-757-024-732 | Sequence 732, Appl | 477 | 13 | 65.0 | 30 | 3 | US-08-757-024-225  | Sequence 225, Appl |
| 499 | 13 | 69.0 | 17 | 3 | US-08-757-024-671 | Sequence 671, Appl | 478 | 13 | 65.0 | 30 | 3 | US-08-757-024-259  | Sequence 259, Appl |
| 499 | 13 | 69.0 | 18 | 3 | US-08-757-024-648 | Sequence 648, Appl | 479 | 13 | 65.0 | 31 | 3 | US-08-757-024-185  | Sequence 185, Appl |
| 499 | 13 | 69.0 | 18 | 3 | US-08-757-024-730 | Sequence 730, Appl | 480 | 13 | 65.0 | 31 | 3 | US-08-757-024-222  | Sequence 222, Appl |
| 499 | 13 | 69.0 | 19 | 3 | US-08-757-024-624 | Sequence 624, Appl | 481 | 13 | 65.0 | 32 | 3 | US-08-757-024-146  | Sequence 146, Appl |
| 499 | 13 | 69.0 | 19 | 3 | US-08-757-024-729 | Sequence 729, Appl | 482 | 13 | 65.0 | 32 | 3 | US-08-757-024-184  | Sequence 184, Appl |
| 499 | 13 | 69.0 | 20 | 3 | US-08-757-024-519 | Sequence 519, Appl | 483 | 13 | 65.0 | 33 | 3 | US-08-757-024-106  | Sequence 106, Appl |
| 499 | 13 | 69.0 | 20 | 3 | US-08-757-024-728 | Sequence 728, Appl | 484 | 13 | 65.0 | 33 | 3 | US-08-757-024-145  | Sequence 145, Appl |
| 499 | 13 | 69.0 | 21 | 3 | US-08-757-024-573 | Sequence 573, Appl | 485 | 13 | 65.0 | 34 | 3 | US-08-757-024-65   | Sequence 65, Appl  |
| 499 | 13 | 69.0 | 21 | 3 | US-08-757-024-727 | Sequence 727, Appl | 486 | 13 | 65.0 | 34 | 3 | US-08-757-024-105  | Sequence 105, Appl |
| 499 | 13 | 69.0 | 22 | 3 | US-08-757-024-546 | Sequence 546, Appl | 487 | 13 | 65.0 | 35 | 3 | US-08-757-024-23   | Sequence 23, Appl  |
| 499 | 13 | 69.0 | 22 | 3 | US-08-757-024-726 | Sequence 726, Appl | 488 | 13 | 65.0 | 35 | 3 | US-08-757-024-64   | Sequence 64, Appl  |
| 499 | 13 | 69.0 | 23 | 3 | US-08-757-024-518 | Sequence 518, Appl | 489 | 13 | 65.0 | 36 | 3 | US-08-757-024-22   | Sequence 22, Appl  |
| 499 | 13 | 69.0 | 23 | 3 | US-08-757-024-725 | Sequence 725, Appl | 490 | 12 | 6.6  | 27 | 1 | US-08-475-115A-126 | Sequence 126, Appl |
| 499 | 13 | 69.0 | 24 | 3 | US-08-757-024-489 | Sequence 489, Appl | 491 | 12 | 6.6  | 19 | 4 | US-09-275-505-1    | Sequence 1, Appl1  |
| 499 | 13 | 69.0 | 24 | 3 | US-08-757-024-724 | Sequence 724, Appl | 492 | 12 | 6.6  | 20 | 1 | US-08-063-167A-83  | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 25 | 3 | US-08-757-024-459 | Sequence 459, Appl | 493 | 12 | 6.6  | 20 | 1 | US-08-414-877-1    | Sequence 1, Appl1  |
| 499 | 13 | 69.0 | 25 | 3 | US-08-757-024-933 | Sequence 933, Appl | 494 | 12 | 6.6  | 20 | 1 | US-08-760-848-1    | Sequence 1, Appl1  |
| 499 | 13 | 69.0 | 26 | 3 | US-08-757-024-428 | Sequence 428, Appl | 495 | 12 | 6.6  | 20 | 2 | US-08-440-740A-83  | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 26 | 3 | US-08-757-024-294 | Sequence 294, Appl | 496 | 12 | 6.6  | 20 | 2 | US-08-468-037A-20  | Sequence 20, Appl  |
| 499 | 13 | 69.0 | 26 | 3 | US-08-757-024-722 | Sequence 722, Appl | 497 | 12 | 6.6  | 20 | 2 | US-08-471-977A-20  | Sequence 20, Appl1 |
| 499 | 13 | 69.0 | 27 | 3 | US-08-757-024-496 | Sequence 496, Appl | 498 | 12 | 6.6  | 20 | 2 | US-08-469-852A-3   | Sequence 3, Appl1  |
| 499 | 13 | 69.0 | 27 | 3 | US-08-757-024-721 | Sequence 721, Appl | 499 | 12 | 6.6  | 20 | 2 | US-08-444-1537-83  | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 28 | 3 | US-08-757-024-361 | Sequence 463, Appl | 500 | 12 | 6.6  | 20 | 2 | US-08-465-880-27   | Sequence 27, Appl1 |
| 499 | 13 | 69.0 | 28 | 3 | US-08-757-024-720 | Sequence 720, Appl | 501 | 12 | 6.6  | 20 | 2 | US-08-809-239A-1   | Sequence 1, Appl1  |
| 499 | 13 | 69.0 | 29 | 3 | US-08-757-024-933 | Sequence 933, Appl | 502 | 12 | 6.6  | 20 | 3 | US-09-045-106-16   | Sequence 16, Appl  |
| 499 | 13 | 69.0 | 30 | 3 | US-08-757-024-429 | Sequence 429, Appl | 503 | 12 | 6.6  | 20 | 3 | US-09-035-357-20   | Sequence 20, Appl  |
| 499 | 13 | 69.0 | 31 | 3 | US-08-757-024-298 | Sequence 298, Appl | 504 | 12 | 6.6  | 20 | 3 | US-08-982-847B-83  | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 32 | 3 | US-08-757-024-254 | Sequence 254, Appl | 505 | 12 | 6.6  | 20 | 3 | US-08-295-509B-3   | Sequence 3, Appl1  |
| 499 | 13 | 69.0 | 33 | 3 | US-08-757-024-221 | Sequence 221, Appl | 506 | 12 | 6.6  | 20 | 3 | US-08-777-266A-101 | Sequence 101, Appl |
| 499 | 13 | 69.0 | 34 | 3 | US-08-757-024-183 | Sequence 183, Appl | 507 | 12 | 6.6  | 20 | 3 | US-09-166-186-141  | Sequence 141, Appl |
| 499 | 13 | 69.0 | 35 | 3 | US-08-757-024-134 | Sequence 144, Appl | 508 | 12 | 6.6  | 20 | 3 | US-08-991-525B-83  | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 36 | 3 | US-08-757-024-104 | Sequence 104, Appl | 509 | 12 | 6.6  | 20 | 3 | US-09-085-759-83   | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 37 | 3 | US-08-757-024-63  | Sequence 63, Appl1 | 510 | 12 | 6.6  | 20 | 3 | US-08-713-742-4    | Sequence 4, Appl13 |
| 499 | 13 | 69.0 | 38 | 3 | US-08-838-262-3   | Sequence 21, Appl1 | 511 | 12 | 6.6  | 20 | 3 | US-09-062-416-14   | Sequence 14, Appl1 |
| 499 | 13 | 69.0 | 39 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 512 | 12 | 6.6  | 20 | 3 | US-09-372-856-4    | Sequence 4, Appl13 |
| 499 | 13 | 69.0 | 40 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 513 | 12 | 6.6  | 20 | 3 | US-09-128-496-83   | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 41 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 514 | 12 | 6.6  | 20 | 3 | US-09-187-995-3    | Sequence 3, Appl13 |
| 499 | 13 | 69.0 | 42 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 515 | 12 | 6.6  | 20 | 3 | US-09-016-520-2    | Sequence 2, Appl13 |
| 499 | 13 | 69.0 | 43 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 516 | 12 | 6.6  | 20 | 3 | US-09-115-027-1    | Sequence 1, Appl13 |
| 499 | 13 | 69.0 | 44 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 517 | 12 | 6.6  | 20 | 3 | US-09-078-954-1    | Sequence 1, Appl13 |
| 499 | 13 | 69.0 | 45 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 518 | 12 | 6.6  | 20 | 3 | US-09-009-490A-83  | Sequence 83, Appl1 |
| 499 | 13 | 69.0 | 46 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 519 | 12 | 6.6  | 20 | 3 | US-09-326-186B-101 | Sequence 101, Appl |
| 499 | 13 | 69.0 | 47 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 520 | 12 | 6.6  | 20 | 3 | US-09-688-394-4    | Sequence 4, Appl13 |
| 499 | 13 | 69.0 | 48 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 521 | 12 | 6.6  | 20 | 3 | US-09-303-586-21   | Sequence 21, Appl1 |
| 499 | 13 | 69.0 | 49 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 522 | 12 | 6.6  | 20 | 3 | US-09-403-586-22   | Sequence 22, Appl1 |
| 499 | 13 | 69.0 | 50 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 523 | 12 | 6.6  | 20 | 3 | US-09-135-202-20   | Sequence 20, Appl1 |
| 499 | 13 | 69.0 | 51 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 524 | 12 | 6.6  | 20 | 3 | US-09-452-059A-6   | Sequence 6, Appl1  |
| 499 | 13 | 69.0 | 52 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 525 | 12 | 6.6  | 20 | 3 | US-08-802-331-27   | Sequence 27, Appl1 |
| 499 | 13 | 69.0 | 53 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 526 | 12 | 6.6  | 20 | 3 | US-09-288-679-6    | Sequence 6, Appl13 |
| 499 | 13 | 69.0 | 54 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 527 | 12 | 6.6  | 20 | 3 | US-09-208-679-7    | Sequence 7, Appl13 |
| 499 | 13 | 69.0 | 55 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 528 | 12 | 6.6  | 20 | 3 | US-09-016-520-2    | Sequence 2, Appl13 |
| 499 | 13 | 69.0 | 56 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 529 | 12 | 6.6  | 20 | 3 | US-09-477-902-2    | Sequence 2, Appl13 |
| 499 | 13 | 69.0 | 57 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 530 | 12 | 6.6  | 20 | 3 | US-09-150-973-2    | Sequence 2, Appl13 |
| 499 | 13 | 69.0 | 58 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 531 | 12 | 6.6  | 20 | 3 | US-08-173-489C-459 | Sequence 459, Appl |
| 499 | 13 | 69.0 | 59 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 532 | 12 | 6.6  | 20 | 3 | US-08-484-708A-153 | Sequence 153, Appl |
| 499 | 13 | 69.0 | 60 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 533 | 12 | 6.6  | 20 | 3 | US-08-037-421-153  | Sequence 153, Appl |
| 499 | 13 | 69.0 | 61 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 534 | 12 | 6.6  | 20 | 3 | US-09-113-309-11   | Sequence 11, Appl1 |
| 499 | 13 | 69.0 | 62 | 3 | US-09-563-713-3   | Sequence 3, Appl1  | 535 | 12 | 6.6  | 20 | 3 | US-09-521-109-11   | Sequence 11, Appl1 |



|       |      |      |    |   |                    |                     |       |    |      |    |   |                    |                     |
|-------|------|------|----|---|--------------------|---------------------|-------|----|------|----|---|--------------------|---------------------|
| c 549 | 12.6 | 63.0 | 41 | 4 | US-09-562-432-11   | Sequence 11, Appl   | c 612 | 12 | 63.0 | 29 | 2 | US-08-814-567A-24  | Sequence 24, Appl   |
| c 540 | 12.6 | 63.0 | 49 | 5 | PCT-US94-11648-7   | Sequence 7, Appl    | c 613 | 12 | 63.0 | 29 | 3 | US-08-757-024-224  | Sequence 224, Appl  |
| c 541 | 12.4 | 62.0 | 14 | 4 | US-08-757-024-734  | Sequence 734, Appl  | c 614 | 12 | 60.0 | 30 | 1 | US-07-642-744-10   | Sequence 10, Appl   |
| c 542 | 12.4 | 62.0 | 14 | 4 | US-08-757-024-752  | Sequence 752, Appl  | c 615 | 12 | 60.0 | 40 | 3 | US-08-439-009A-10  | Sequence 10, Appl   |
| c 543 | 12.4 | 62.0 | 15 | 3 | US-08-757-024-751  | Sequence 751, Appl  | c 616 | 12 | 60.0 | 40 | 3 | US-08-757-024-186  | Sequence 186, Appl  |
| c 544 | 12.4 | 62.0 | 16 | 3 | US-08-757-024-750  | Sequence 750, Appl  | c 617 | 12 | 60.0 | 40 | 3 | US-08-757-024-147  | Sequence 147, Appl  |
| c 545 | 12.4 | 62.0 | 17 | 3 | US-08-757-024-748  | Sequence 748, Appl  | c 618 | 12 | 60.0 | 42 | 3 | US-08-757-024-107  | Sequence 107, Appl  |
| c 546 | 12.4 | 62.0 | 18 | 3 | US-08-757-024-746  | Sequence 746, Appl  | c 619 | 12 | 60.0 | 43 | 3 | US-08-757-024-66   | Sequence 66, Appl   |
| c 547 | 12.4 | 62.0 | 19 | 3 | US-08-757-024-744  | Sequence 744, Appl  | c 620 | 12 | 60.0 | 34 | 3 | US-08-757-024-24   | Sequence 24, Appl   |
| c 548 | 12.4 | 62.0 | 20 | 3 | US-08-757-024-742  | Sequence 742, Appl  | c 621 | 12 | 60.0 | 36 | 1 | US-08-137-1170-46  | Sequence 46, Appl   |
| c 549 | 12.4 | 62.0 | 21 | 3 | US-08-757-024-740  | Sequence 740, Appl  | c 622 | 12 | 60.0 | 36 | 1 | US-08-436-717-46   | Sequence 46, Appl   |
| c 550 | 12.4 | 62.0 | 22 | 3 | US-08-757-024-738  | Sequence 738, Appl  | c 623 | 12 | 60.0 | 38 | 2 | US-08-572-959-3    | Sequence 3, Appl    |
| c 551 | 12.4 | 62.0 | 23 | 3 | US-08-757-024-736  | Sequence 736, Appl  | c 624 | 12 | 60.0 | 38 | 2 | US-08-817-452-3    | Sequence 3, Appl    |
| c 552 | 12.4 | 62.0 | 24 | 3 | US-08-757-024-734  | Sequence 734, Appl  | c 625 | 12 | 60.0 | 39 | 2 | US-08-652-558-32   | Sequence 32, Appl   |
| c 553 | 12.4 | 62.0 | 25 | 3 | US-08-757-024-732  | Sequence 732, Appl  | c 626 | 12 | 60.0 | 40 | 3 | US-08-850-961-41   | Sequence 41, Appl   |
| c 554 | 12.4 | 62.0 | 26 | 3 | US-08-757-024-730  | Sequence 730, Appl  | c 627 | 12 | 60.0 | 40 | 3 | US-08-850-961-41   | Sequence 41, Appl   |
| c 555 | 12.4 | 62.0 | 27 | 3 | US-08-757-024-728  | Sequence 728, Appl  | c 628 | 12 | 60.0 | 40 | 4 | US-09-479-776-41   | Sequence 41, Appl   |
| c 556 | 12.4 | 62.0 | 28 | 3 | US-08-757-024-726  | Sequence 726, Appl  | c 629 | 12 | 60.0 | 40 | 4 | US-08-848-7608-19  | Sequence 19, Appl   |
| c 557 | 12.4 | 62.0 | 29 | 3 | US-08-757-024-724  | Sequence 724, Appl  | c 630 | 12 | 60.0 | 43 | 2 | US-08-584-040-2106 | Sequence 2106, Appl |
| c 558 | 12.4 | 62.0 | 30 | 3 | US-08-757-024-722  | Sequence 722, Appl  | c 631 | 12 | 60.0 | 17 | 1 | US-08-584-040-2106 | Sequence 4, Appl    |
| c 559 | 12.2 | 61.0 | 18 | 4 | US-09-115-027-2    | Sequence 2, Appl    | c 632 | 12 | 60.0 | 19 | 3 | US-08-388-381-4    | Sequence 4, Appl    |
| c 560 | 12.2 | 61.0 | 20 | 4 | US-09-275-505-2    | Sequence 2, Appl    | c 633 | 12 | 60.0 | 19 | 3 | US-08-765-626-4    | Sequence 4, Appl    |
| c 561 | 12.2 | 61.0 | 20 | 4 | US-08-375-116A-53  | Sequence 53, Appl   | c 634 | 12 | 60.0 | 19 | 3 | PCT-US95-08605-4   | Sequence 4, Appl    |
| c 562 | 12.2 | 61.0 | 24 | 1 | US-08-480-640A-127 | Sequence 127, Appl  | c 635 | 12 | 60.0 | 21 | 2 | US-08-206-790A-16  | Sequence 16, Appl   |
| c 563 | 12.2 | 61.0 | 24 | 3 | US-08-295-802-127  | Sequence 127, Appl  | c 636 | 12 | 60.0 | 21 | 5 | PCT-US95-02943-16  | Sequence 16, Appl   |
| c 564 | 12.2 | 61.0 | 24 | 3 | US-08-488-247A-127 | Sequence 127, Appl  | c 637 | 12 | 60.0 | 23 | 1 | US-08-281-082A-32  | Sequence 32, Appl   |
| c 565 | 12.2 | 61.0 | 24 | 4 | US-08-375-992A-127 | Sequence 127, Appl  | c 638 | 12 | 60.0 | 24 | 1 | US-08-281-082A-17  | Sequence 17, Appl   |
| c 566 | 12.2 | 61.0 | 25 | 1 | US-08-375-116A-54  | Sequence 54, Appl   | c 639 | 12 | 60.0 | 26 | 4 | US-08-718-324A-2   | Sequence 2, Appl    |
| c 567 | 12.2 | 61.0 | 25 | 1 | US-08-156-38-7     | Sequence 7, Appl    | c 640 | 12 | 60.0 | 26 | 4 | US-09-587-526-2    | Sequence 2, Appl    |
| c 568 | 12.2 | 61.0 | 29 | 1 | US-08-340-136-7    | Sequence 7, Appl    | c 641 | 12 | 60.0 | 28 | 1 | US-08-340-011-16   | Sequence 16, Appl   |
| c 569 | 12.2 | 61.0 | 29 | 5 | PCT-US92-10866-7   | Sequence 7, Appl    | c 642 | 12 | 60.0 | 28 | 4 | US-08-901-710-16   | Sequence 16, Appl   |
| c 570 | 12.2 | 61.0 | 30 | 1 | US-08-471-570-18   | Sequence 18, Appl   | c 643 | 12 | 60.0 | 28 | 4 | US-08-990-823-109  | Sequence 109, Appl  |
| c 571 | 12.2 | 61.0 | 33 | 4 | US-08-427-569-33   | Sequence 33, Appl   | c 644 | 12 | 60.0 | 29 | 2 | US-08-820-825-5    | Sequence 5, Appl    |
| c 572 | 12.2 | 61.0 | 33 | 4 | US-08-253-155A-81  | Sequence 81, Appl   | c 645 | 12 | 60.0 | 29 | 2 | US-08-820-825-7    | Sequence 7, Appl    |
| c 573 | 12.2 | 61.0 | 38 | 1 | US-08-625-209A-10  | Sequence 10, Appl   | c 646 | 12 | 60.0 | 29 | 4 | US-09-307-817-7    | Sequence 7, Appl    |
| c 574 | 12.2 | 61.0 | 38 | 3 | US-08-853-733B-10  | Sequence 10, Appl   | c 647 | 12 | 60.0 | 29 | 4 | US-09-734-036-5    | Sequence 5, Appl    |
| c 575 | 12.2 | 61.0 | 39 | 1 | US-08-444-241-5    | Sequence 5, Appl    | c 648 | 12 | 60.0 | 29 | 4 | US-09-734-036-7    | Sequence 7, Appl    |
| c 576 | 12.2 | 61.0 | 39 | 1 | US-08-152-443A-5   | Sequence 5, Appl    | c 649 | 12 | 60.0 | 30 | 2 | US-08-812-003-7    | Sequence 7, Appl    |
| c 577 | 12.2 | 61.0 | 42 | 1 | US-08-375-116A-17  | Sequence 17, Appl   | c 650 | 12 | 60.0 | 40 | 2 | US-08-446-648-44   | Sequence 44, Appl   |
| c 578 | 12.2 | 61.0 | 42 | 1 | US-08-375-116A-22  | Sequence 22, Appl   | c 651 | 12 | 60.0 | 42 | 5 | PCT-US95-04228-44  | Sequence 44, Appl   |
| c 579 | 12.2 | 61.0 | 43 | 1 | US-08-203-716-11   | Sequence 11, Appl   | c 652 | 12 | 60.0 | 43 | 4 | US-09-206-059-47   | Sequence 47, Appl   |
| c 580 | 12.2 | 61.0 | 43 | 1 | US-08-440-179-11   | Sequence 11, Appl   | c 653 | 12 | 60.0 | 46 | 4 | US-09-427-700-2    | Sequence 2, Appl    |
| c 581 | 12.2 | 61.0 | 43 | 3 | US-09-039-657-11   | Sequence 11, Appl   | c 654 | 12 | 60.0 | 46 | 4 | US-08-653-648A-24  | Sequence 24, Appl   |
| c 582 | 12.2 | 61.0 | 47 | 4 | US-09-641-638-1255 | Sequence 1255, Appl | c 655 | 12 | 60.0 | 49 | 4 | US-08-653-648A-31  | Sequence 31, Appl   |
| c 583 | 12.2 | 61.0 | 48 | 2 | US-08-487-811A-23  | Sequence 23, Appl   | c 656 | 12 | 60.0 | 49 | 4 | US-08-672-564-7    | Sequence 7, Appl    |
| c 584 | 12.2 | 61.0 | 48 | 4 | US-09-060-694-23   | Sequence 23, Appl   | c 657 | 12 | 60.0 | 40 | 4 | US-09-503-505A-6   | Sequence 6, Appl    |
| c 585 | 12.2 | 61.0 | 50 | 1 | US-08-384-708A-142 | Sequence 142, Appl  | c 658 | 12 | 60.0 | 24 | 2 | US-08-474-450A-47  | Sequence 47, Appl   |
| c 586 | 12.2 | 61.0 | 50 | 4 | US-08-687-421-142  | Sequence 142, Appl  | c 659 | 12 | 60.0 | 24 | 2 | US-08-859-998-1226 | Sequence 1226, Appl |
| c 587 | 12   | 60.0 | 12 | 3 | US-08-757-024-717  | Sequence 717, Appl  | c 660 | 12 | 60.0 | 27 | 4 | US-09-225-928-1226 | Sequence 1226, Appl |
| c 588 | 12   | 60.0 | 12 | 3 | US-08-757-024-716  | Sequence 716, Appl  | c 661 | 12 | 60.0 | 27 | 4 | US-08-543-630-4    | Sequence 4, Appl    |
| c 589 | 12   | 60.0 | 13 | 3 | US-08-757-024-715  | Sequence 715, Appl  | c 662 | 12 | 60.0 | 28 | 3 | US-08-650-726-1    | Sequence 1, Appl    |
| c 590 | 12   | 60.0 | 13 | 3 | US-08-757-024-696  | Sequence 696, Appl  | c 663 | 12 | 60.0 | 33 | 3 | US-09-450-072-12   | Sequence 12, Appl   |
| c 591 | 12   | 60.0 | 14 | 3 | US-08-757-024-745  | Sequence 745, Appl  | c 664 | 12 | 60.0 | 33 | 4 | US-09-351-448-12   | Sequence 12, Appl   |
| c 592 | 12   | 60.0 | 15 | 3 | US-08-757-024-674  | Sequence 674, Appl  | c 665 | 12 | 60.0 | 34 | 4 | US-09-450-072-31   | Sequence 31, Appl   |
| c 593 | 12   | 60.0 | 15 | 3 | US-08-757-024-651  | Sequence 651, Appl  | c 666 | 12 | 60.0 | 34 | 4 | US-09-451-348-31   | Sequence 31, Appl   |
| c 594 | 12   | 60.0 | 16 | 3 | US-08-757-024-627  | Sequence 627, Appl  | c 667 | 12 | 60.0 | 34 | 4 | US-09-053-474A-9   | Sequence 9, Appl    |
| c 595 | 12   | 60.0 | 16 | 4 | US-09-380-662-14   | Sequence 14, Appl   | c 668 | 12 | 60.0 | 35 | 4 | US-08-423-399B-25  | Sequence 25, Appl   |
| c 596 | 12   | 60.0 | 17 | 1 | US-08-758-306-923  | Sequence 923, Appl  | c 669 | 12 | 60.0 | 36 | 2 | US-08-834-963-7    | Sequence 7, Appl    |
| c 597 | 12   | 60.0 | 17 | 3 | US-08-757-024-602  | Sequence 602, Appl  | c 670 | 12 | 60.0 | 37 | 4 | US-09-450-072-53   | Sequence 53, Appl   |
| c 598 | 12   | 60.0 | 18 | 3 | US-08-757-024-576  | Sequence 576, Appl  | c 671 | 12 | 60.0 | 37 | 4 | US-09-451-348-53   | Sequence 53, Appl   |
| c 599 | 12   | 60.0 | 19 | 3 | US-08-757-024-549  | Sequence 549, Appl  | c 672 | 12 | 60.0 | 39 | 4 | US-09-439-261-47   | Sequence 47, Appl   |
| c 600 | 12   | 60.0 | 20 | 3 | US-08-757-024-521  | Sequence 521, Appl  | c 673 | 12 | 60.0 | 40 | 1 | US-08-390-878-2    | Sequence 2, Appl    |
| c 601 | 12   | 60.0 | 21 | 3 | US-08-757-024-492  | Sequence 492, Appl  | c 674 | 12 | 60.0 | 40 | 4 | US-09-456-483-1    | Sequence 1, Appl    |
| c 602 | 12   | 60.0 | 22 | 3 | US-08-757-024-462  | Sequence 462, Appl  | c 675 | 12 | 60.0 | 40 | 4 | US-09-823-177-1    | Sequence 1, Appl    |
| c 603 | 12   | 60.0 | 23 | 2 | US-08-823-516-100  | Sequence 100, Appl  | c 676 | 12 | 60.0 | 44 | 1 | US-08-253-8770-45  | Sequence 45, Appl   |
| c 604 | 12   | 60.0 | 23 | 4 | US-08-757-024-431  | Sequence 431, Appl  | c 677 | 12 | 60.0 | 44 | 2 | US-08-452-164A-45  | Sequence 45, Appl   |
| c 605 | 12   | 60.0 | 23 | 4 | US-08-759-038-88   | Sequence 88, Appl   | c 678 | 12 | 60.0 | 45 | 1 | US-08-171-389-123  | Sequence 123, Appl  |
| c 606 | 12   | 60.0 | 23 | 4 | US-08-758-314-88   | Sequence 88, Appl   | c 679 | 12 | 60.0 | 45 | 1 | US-08-123-936-123  | Sequence 123, Appl  |
| c 607 | 12   | 60.0 | 24 | 3 | US-08-757-024-399  | Sequence 399, Appl  | c 680 | 12 | 60.0 | 45 | 1 |                    |                     |
| c 608 | 12   | 60.0 | 25 | 3 | US-08-757-024-366  | Sequence 366, Appl  | c 681 | 12 | 60.0 | 45 | 1 |                    |                     |
| c 609 | 12   | 60.0 | 26 | 3 | US-08-757-024-332  | Sequence 332, Appl  | c 682 | 12 | 60.0 | 45 | 1 |                    |                     |
| c 610 | 12   | 60.0 | 27 | 3 | US-08-757-024-297  | Sequence 297, Appl  | c 683 | 12 | 60.0 | 45 | 1 |                    |                     |
| c 611 | 12   | 60.0 | 28 | 3 | US-08-757-024-261  | Sequence 261, Appl  | c 684 | 12 | 60.0 | 45 | 1 |                    |                     |

|     |      |      |    |   |                     |                    |       |      |      |    |   |                    |                    |
|-----|------|------|----|---|---------------------|--------------------|-------|------|------|----|---|--------------------|--------------------|
| 685 | 11.6 | 58.0 | 45 | 2 | US 08 475-228A-124  | Sequence 124, App  | 758   | 11.2 | 56.0 | 24 | 2 | US 08 477 890 1    | Sequence 1, Appl   |
| 686 | 11.6 | 58.0 | 45 | 3 | US 08 482-080A-124  | Sequence 124, App  | c 759 | 11.2 | 56.0 | 24 | 2 | US 08 462 646 18   | Sequence 18, Appl  |
| 687 | 11.6 | 58.0 | 45 | 4 | US 09 354-947-124   | Sequence 124, App  | 760   | 11.2 | 56.0 | 24 | 2 | US 08 462 646 98   | Sequence 98, Appl  |
| 688 | 11.6 | 58.0 | 45 | 5 | 19CT-US93-12488-124 | Sequence 124, App  | c 761 | 11.2 | 56.0 | 24 | 2 | US 08 462 646 135  | Sequence 135, Appl |
| 689 | 11.6 | 58.0 | 47 | 4 | US 09 641-638-1247  | Sequence 1247, App | 762   | 11.2 | 56.0 | 24 | 2 | US 08 462 646 159  | Sequence 159, Appl |
| 690 | 11.6 | 58.0 | 50 | 1 | US 08 171-489 114   | Sequence 114, App  | 763   | 11.2 | 56.0 | 24 | 2 | US 08 249 037 16   | Sequence 16, Appl  |
| 691 | 11.6 | 58.0 | 50 | 1 | US 08 324-001-11    | Sequence 10, Appl  | 764   | 11.2 | 56.0 | 24 | 2 | US 08 788 6224 16  | Sequence 16, Appl  |
| 692 | 11.6 | 58.0 | 50 | 1 | US 08 324-001 11    | Sequence 11, Appl  | 765   | 11.2 | 56.0 | 24 | 2 | US 08 467 034A 1   | Sequence 1, Appl   |
| 693 | 11.6 | 58.0 | 50 | 1 | US 08 123-936-114   | Sequence 114, App  | 766   | 11.2 | 56.0 | 24 | 3 | US 08 788 6218 16  | Sequence 16, Appl  |
| 694 | 11.6 | 58.0 | 50 | 2 | US 08 475-228A-114  | Sequence 114, App  | 767   | 11.2 | 56.0 | 24 | 4 | US 08 468 646A 1   | Sequence 1, Appl   |
| 695 | 11.6 | 58.0 | 50 | 3 | US 08 482-080A-114  | Sequence 114, App  | c 768 | 11.2 | 56.0 | 24 | 4 | US 09 013 406 18   | Sequence 18, Appl  |
| 696 | 11.6 | 58.0 | 50 | 4 | US 09 354-947-114   | Sequence 114, App  | 769   | 11.2 | 56.0 | 24 | 4 | US 09 013 406 98   | Sequence 98, Appl  |
| 697 | 11.6 | 58.0 | 50 | 5 | 19CT-US93-12488-114 | Sequence 114, App  | c 770 | 11.2 | 56.0 | 24 | 4 | US 09 013 406 135  | Sequence 135, Appl |
| 698 | 11.4 | 57.0 | 13 | 3 | US 08 757-024-754   | Sequence 754, App  | 771   | 11.2 | 56.0 | 24 | 4 | US 09 013 406 139  | Sequence 139, Appl |
| 699 | 11.4 | 57.0 | 13 | 3 | US 08 757-024-754   | Sequence 770, App  | c 772 | 11.2 | 56.0 | 24 | 5 | 19CT-US95 03602-8  | Sequence 8, Appl   |
| 700 | 11.4 | 57.0 | 14 | 3 | US 08 757-024-770   | Sequence 769, App  | 773   | 11.2 | 56.0 | 25 | 1 | US 08 281 082A 44  | Sequence 44, Appl  |
| 701 | 11.4 | 57.0 | 15 | 3 | US 08 757-024-769   | Sequence 768, App  | c 774 | 11.2 | 56.0 | 25 | 1 | US 08 434 565 31   | Sequence 31, Appl  |
| 702 | 11.4 | 57.0 | 16 | 3 | US 08 757-024-768   | Sequence 767, App  | 775   | 11.2 | 56.0 | 25 | 1 | US 08 495 743 63   | Sequence 63, Appl  |
| 703 | 11.4 | 57.0 | 17 | 3 | US 08 757-024-767   | Sequence 766, App  | 776   | 11.2 | 56.0 | 25 | 1 | US 08 495 749-63   | Sequence 63, Appl  |
| 704 | 11.4 | 57.0 | 17 | 4 | US 08 584-040-2105  | Sequence 2105, App | 777   | 11.2 | 56.0 | 25 | 1 | US 08 495 741 63   | Sequence 63, Appl  |
| 705 | 11.4 | 57.0 | 18 | 3 | US 08 757-024-765   | Sequence 765, App  | c 778 | 11.2 | 56.0 | 25 | 2 | US 08 661 479 31   | Sequence 31, Appl  |
| 706 | 11.4 | 57.0 | 19 | 3 | US 08 757-024-764   | Sequence 764, App  | 779   | 11.2 | 56.0 | 25 | 4 | US 08 662 024 63   | Sequence 63, Appl  |
| 707 | 11.4 | 57.0 | 20 | 3 | US 08 757-024-763   | Sequence 763, App  | c 780 | 11.2 | 56.0 | 25 | 4 | US 08 957 621-2    | Sequence 2, Appl   |
| 708 | 11.4 | 57.0 | 20 | 3 | US 08 765-340-24    | Sequence 24, Appl  | 781   | 11.2 | 56.0 | 26 | 1 | US 08 281 082A 44  | Sequence 44, Appl  |
| 709 | 11.4 | 57.0 | 21 | 3 | US 08 757-024-762   | Sequence 762, App  | 782   | 11.2 | 56.0 | 26 | 1 | US 08 281 082A 45  | Sequence 45, Appl  |
| 710 | 11.4 | 57.0 | 22 | 3 | US 08 757-024-761   | Sequence 761, App  | 783   | 11.2 | 56.0 | 26 | 3 | US 07 808 452 19   | Sequence 19, Appl  |
| 711 | 11.4 | 57.0 | 23 | 2 | US 08 823-516-102   | Sequence 102, App  | 784   | 11.2 | 56.0 | 26 | 5 | 19CT-US92 10770-19 | Sequence 19, Appl  |
| 712 | 11.4 | 57.0 | 23 | 3 | US 08 757-024-760   | Sequence 760, App  | 785   | 11.2 | 56.0 | 26 | 5 | 19CT-US92 10792 17 | Sequence 17, Appl  |
| 713 | 11.4 | 57.0 | 23 | 3 | US 08 759-038 85    | Sequence 85, Appl  | c 786 | 11.2 | 56.0 | 27 | 1 | US 08 150 341 40   | Sequence 40, Appl  |
| 714 | 11.4 | 57.0 | 23 | 3 | US 08 758-314 85    | Sequence 85, Appl  | 787   | 11.2 | 56.0 | 27 | 2 | US 08 467 034A 6   | Sequence 6, Appl   |
| 715 | 11.4 | 57.0 | 24 | 2 | US 08 673-312-5     | Sequence 5, Appl   | 788   | 11.2 | 56.0 | 27 | 4 | US 08 468 646A 6   | Sequence 6, Appl   |
| 716 | 11.4 | 57.0 | 24 | 3 | US 08 757-024-759   | Sequence 759, App  | 789   | 11.2 | 56.0 | 27 | 4 | US 09 409-648 14   | Sequence 14, Appl  |
| 717 | 11.4 | 57.0 | 25 | 3 | US 08 757-024-758   | Sequence 758, App  | c 790 | 11.2 | 56.0 | 28 | 2 | US 08 477 890-2    | Sequence 2, Appl   |
| 718 | 11.4 | 57.0 | 26 | 3 | US 08 757-024-757   | Sequence 757, App  | c 791 | 11.2 | 56.0 | 28 | 2 | US 08 467 034A 2   | Sequence 2, Appl   |
| 719 | 11.4 | 57.0 | 26 | 3 | US 08 757-024-945   | Sequence 945, App  | c 792 | 11.2 | 56.0 | 28 | 4 | US 08 468 646A 2   | Sequence 2, Appl   |
| 720 | 11.4 | 57.0 | 26 | 4 | US 08 765-340-3     | Sequence 3, Appl   | c 793 | 11.2 | 56.0 | 29 | 1 | US 08 233 030 3    | Sequence 3, Appl   |
| 721 | 11.4 | 57.0 | 26 | 4 | US 09 283-144-7     | Sequence 7, Appl   | 794   | 11.2 | 56.0 | 29 | 3 | US 07 808 452 10   | Sequence 10, Appl  |
| 722 | 11.4 | 57.0 | 29 | 1 | US 08 349-696-13    | Sequence 13, Appl  | 795   | 11.2 | 56.0 | 29 | 5 | 19CT-US92 10770 10 | Sequence 10, Appl  |
| 723 | 11.4 | 57.0 | 29 | 1 | US 08 233-009-13    | Sequence 13, Appl  | 796   | 11.2 | 56.0 | 29 | 5 | 19CT-US92 10792 8  | Sequence 8, Appl   |
| 724 | 11.4 | 57.0 | 29 | 1 | US 08 560 231-13    | Sequence 13, Appl  | 797   | 11.2 | 56.0 | 30 | 1 | US 08 599 5808 11  | Sequence 11, Appl  |
| 725 | 11.4 | 57.0 | 29 | 1 | US 09 080-704A-13   | Sequence 13, Appl  | c 798 | 11.2 | 56.0 | 30 | 3 | US 08 379 452 5    | Sequence 5, Appl   |
| 726 | 11.4 | 57.0 | 30 | 2 | US 08 808 550 19    | Sequence 19, Appl  | 799   | 11.2 | 56.0 | 30 | 3 | US 08 557 210A 25  | Sequence 25, Appl  |
| 727 | 11.4 | 57.0 | 32 | 1 | US 07 832-904R 45   | Sequence 45, Appl  | c 800 | 11.2 | 56.0 | 30 | 4 | US 09 409 670 5    | Sequence 5, Appl   |
| 728 | 11.4 | 57.0 | 32 | 1 | US 08 656-984A 48   | Sequence 48, Appl  | 801   | 11.2 | 56.0 | 30 | 4 | US 09 199 290 18   | Sequence 18, Appl  |
| 729 | 11.4 | 57.0 | 32 | 2 | US 08 700-757-45    | Sequence 45, Appl  | 802   | 11.2 | 56.0 | 30 | 4 | US 09 651 656 69   | Sequence 69, Appl  |
| 730 | 11.4 | 57.0 | 34 | 1 | US 08 102-567-13    | Sequence 13, Appl  | 803   | 11.2 | 56.0 | 30 | 4 | US 09 651 656 79   | Sequence 79, Appl  |
| 731 | 11.4 | 57.0 | 34 | 3 | US 08 462-947 13    | Sequence 13, Appl  | 804   | 11.2 | 56.0 | 30 | 4 | US 09 650 855 69   | Sequence 69, Appl  |
| 732 | 11.4 | 57.0 | 42 | 1 | US 08 375-116A 5    | Sequence 5, Appl   | 805   | 11.2 | 56.0 | 30 | 4 | US 09 650 855 79   | Sequence 79, Appl  |
| 733 | 11.4 | 57.0 | 42 | 1 | US 08 375-116A-12   | Sequence 12, Appl  | 806   | 11.2 | 56.0 | 33 | 2 | US 08 353 476 18   | Sequence 18, Appl  |
| 734 | 11.4 | 57.0 | 46 | 4 | US 09 390-867A-39   | Sequence 39, Appl  | 807   | 11.2 | 56.0 | 35 | 2 | US 08 663 560A 26  | Sequence 26, Appl  |
| 735 | 11.4 | 57.0 | 46 | 4 | US 09 548-260-49    | Sequence 49, Appl  | 808   | 11.2 | 56.0 | 35 | 2 | US 08 023 610 26   | Sequence 26, Appl  |
| 736 | 11.4 | 57.0 | 47 | 4 | US 09 641-638-1104  | Sequence 1104, App | 809   | 11.2 | 56.0 | 35 | 2 | US 08 288 065A 26  | Sequence 26, Appl  |
| 737 | 11.2 | 56.0 | 18 | 1 | US 07 741-940-39    | Sequence 39, Appl  | 810   | 11.2 | 56.0 | 35 | 2 | US 08 462 240A 26  | Sequence 26, Appl  |
| 738 | 11.2 | 56.0 | 18 | 1 | US 08 289-548A-39   | Sequence 39, Appl  | c 811 | 11.2 | 56.0 | 35 | 4 | US 09 055 765 16   | Sequence 16, Appl  |
| 739 | 11.2 | 56.0 | 18 | 1 | US 08 452-654-39    | Sequence 39, Appl  | 812   | 11.2 | 56.0 | 35 | 4 | US 09 415 784 113  | Sequence 113, Appl |
| 740 | 11.2 | 56.0 | 18 | 1 | US 08 452-654H-39   | Sequence 39, Appl  | c 813 | 11.2 | 56.0 | 35 | 4 | US 09 415 785A 113 | Sequence 113, Appl |
| 741 | 11.2 | 56.0 | 18 | 3 | US 08 450-582-39    | Sequence 39, Appl  | 814   | 11.2 | 56.0 | 35 | 4 | US 08 944-465 113  | Sequence 113, Appl |
| 742 | 11.2 | 56.0 | 18 | 3 | US 08 863-813A-61   | Sequence 61, Appl  | c 815 | 11.2 | 56.0 | 35 | 4 | US 09 415 868 113  | Sequence 113, Appl |
| 743 | 11.2 | 56.0 | 18 | 4 | US 08 449-731-39    | Sequence 39, Appl  | c 816 | 11.2 | 56.0 | 35 | 4 | US 09 415 900 113  | Sequence 113, Appl |
| 744 | 11.2 | 56.0 | 20 | 4 | US 09 226-012-42    | Sequence 32, Appl  | 817   | 11.2 | 56.0 | 35 | 5 | 19CT-US95 10245 26 | Sequence 26, Appl  |
| 745 | 11.2 | 56.0 | 20 | 4 | US 09 166-448 19    | Sequence 19, Appl  | 818   | 11.2 | 56.0 | 36 | 2 | US 08 488 402A 34  | Sequence 34, Appl  |
| 746 | 11.2 | 56.0 | 20 | 4 | US 09 851-520 19    | Sequence 19, Appl  | 819   | 11.2 | 56.0 | 36 | 2 | US 08 484 552A 34  | Sequence 34, Appl  |
| 747 | 11.2 | 56.0 | 20 | 4 | US 09 697-884 19    | Sequence 19, Appl  | 820   | 11.2 | 56.0 | 36 | 5 | 19CT-US96 09472 34 | Sequence 34, Appl  |
| 748 | 11.2 | 56.0 | 20 | 4 | US 08 517-467B 219  | Sequence 219, App  | 821   | 11.2 | 56.0 | 38 | 1 | US 08 530 492 19   | Sequence 19, Appl  |
| 749 | 11.2 | 56.0 | 21 | 2 | US 08 532-751-2     | Sequence 2, Appl   | 822   | 11.2 | 56.0 | 38 | 1 | US 08 445 050 13   | Sequence 13, Appl  |
| 750 | 11.2 | 56.0 | 21 | 2 | US 08 532-751-6     | Sequence 6, Appl   | 823   | 11.2 | 56.0 | 38 | 1 | US 08 204 691 13   | Sequence 13, Appl  |
| 751 | 11.2 | 56.0 | 24 | 1 | US 08 281-082A-11   | Sequence 11, Appl  | 824   | 11.2 | 56.0 | 38 | 3 | US 08 863 813A 49  | Sequence 49, Appl  |
| 752 | 11.2 | 56.0 | 24 | 1 | US 08 408-656 8     | Sequence 8, Appl   | 825   | 11.2 | 56.0 | 38 | 4 | US 08 906 517 19   | Sequence 19, Appl  |
| 753 | 11.2 | 56.0 | 24 | 1 | US 08 479-852 18    | Sequence 18, Appl  | c 826 | 11.2 | 56.0 | 39 | 4 | US 09 208 966 26   | Sequence 26, Appl  |
| 754 | 11.2 | 56.0 | 24 | 1 | US 08 479-852-98    | Sequence 98, Appl  | 827   | 11.2 | 56.0 | 39 | 4 | US 09 428 589 3    | Sequence 3, Appl   |
| 755 | 11.2 | 56.0 | 24 | 1 | US 08 479-852 135   | Sequence 135, App  | 828   | 11.2 | 56.0 | 40 | 1 | US 08 199 507B 45  | Sequence 45, Appl  |
| 756 | 11.2 | 56.0 | 24 | 1 | US 08 479-852 135   | Sequence 135, App  | 829   | 11.2 | 56.0 | 40 | 1 | US 08 441 828 45   | Sequence 45, Appl  |
| 757 | 11.2 | 56.0 | 24 | 1 | US 08 479-852 139   | Sequence 139, App  | c 830 | 11.2 | 56.0 | 42 | 2 | US 08 989 594 17   | Sequence 17, Appl  |

|       |      |      |    |   |                   |                   |       |    |      |    |   |                    |                       |
|-------|------|------|----|---|-------------------|-------------------|-------|----|------|----|---|--------------------|-----------------------|
| c 831 | 11.2 | 56.0 | 42 | 4 | US-09-271-465-17  | Sequence 17, Appl | c 904 | 11 | 55.0 | 26 | 4 | US-09-243-818-48   | Sequence 48, Appl     |
| c 832 | 11.2 | 56.0 | 42 | 4 | US-09-079-964A-5  | Sequence 5, Appl  | c 905 | 11 | 55.0 | 26 | 5 | PCT-US94-08429-1   | Sequence 1, Appl      |
| c 833 | 11.2 | 56.0 | 42 | 4 | US-09-604-014A-17 | Sequence 17, Appl | c 906 | 11 | 55.0 | 27 | 1 | US-08-405-699-19   | Sequence 19, Appl     |
| c 834 | 11.2 | 56.0 | 43 | 4 | US-08-989-394-13  | Sequence 13, Appl | c 907 | 11 | 55.0 | 27 | 1 | US-08-405-699-21   | Sequence 21, Appl     |
| c 835 | 11.2 | 56.0 | 43 | 4 | US-09-271-465-13  | Sequence 13, Appl | c 908 | 11 | 55.0 | 27 | 2 | US-08-745-609-7    | Sequence 7, Appl      |
| c 836 | 11.2 | 56.0 | 43 | 4 | US-09-604-014A-14 | Sequence 14, Appl | c 909 | 11 | 55.0 | 27 | 2 | US-08-745-609-7    | Sequence 7, Appl      |
| c 837 | 11.2 | 56.0 | 45 | 4 | US-08-353-476-31  | Sequence 31, Appl | c 910 | 11 | 55.0 | 27 | 3 | US-08-757-024-262  | Sequence 262, Appl    |
| c 838 | 11.2 | 56.0 | 45 | 3 | US-08-864-814A-56 | Sequence 56, Appl | c 911 | 11 | 55.0 | 27 | 3 | US-09-315-372-7    | Sequence 7, Appl      |
| c 839 | 11.2 | 56.0 | 45 | 4 | US-08-569-147-31  | Sequence 31, Appl | c 912 | 11 | 55.0 | 27 | 3 | US-09-244-752-7    | Sequence 7, Appl      |
| c 840 | 11.2 | 56.0 | 45 | 4 | US-08-976-184A-26 | Sequence 26, Appl | c 913 | 11 | 55.0 | 27 | 3 | US-09-245-497-7    | Sequence 7, Appl      |
| c 841 | 11.2 | 56.0 | 47 | 4 | US-09-641-648-673 | Sequence 673, App | c 914 | 11 | 55.0 | 27 | 4 | US-09-562-919-7    | Sequence 7, Appl      |
| c 842 | 11.2 | 56.0 | 47 | 4 | US-09-651-656-71  | Sequence 680, App | c 915 | 11 | 55.0 | 28 | 2 | US-08-757-024-225  | Sequence 225, App     |
| c 843 | 11.2 | 56.0 | 48 | 4 | US-09-651-656-71  | Sequence 71, Appl | c 916 | 11 | 55.0 | 28 | 2 | US-08-670-175-4    | Sequence 4, Appl      |
| c 844 | 11.2 | 56.0 | 48 | 4 | US-09-650-855-11  | Sequence 11, Appl | c 917 | 11 | 55.0 | 29 | 3 | US-08-757-024-187  | Sequence 187, App     |
| c 845 | 11.2 | 56.0 | 49 | 2 | US-08-989-394-16  | Sequence 16, Appl | c 918 | 11 | 55.0 | 29 | 4 | US-09-400-622-3    | Sequence 3, Appl      |
| c 846 | 11.2 | 56.0 | 49 | 2 | US-08-989-394-22  | Sequence 22, Appl | c 919 | 11 | 55.0 | 30 | 1 | US-08-467-126-1    | Sequence 1, Appl      |
| c 847 | 11.2 | 56.0 | 49 | 4 | US-09-271-465-16  | Sequence 16, Appl | c 920 | 11 | 55.0 | 30 | 1 | US-08-467-126-6    | Sequence 6, Appl      |
| c 848 | 11.2 | 56.0 | 49 | 4 | US-09-271-465-22  | Sequence 22, Appl | c 921 | 11 | 55.0 | 30 | 2 | US-08-476-712-3    | Sequence 3, Appl      |
| c 849 | 11.2 | 56.0 | 49 | 4 | US-09-604-014A-16 | Sequence 16, Appl | c 922 | 11 | 55.0 | 30 | 2 | US-08-476-712-5    | Sequence 5, Appl      |
| c 850 | 11.2 | 56.0 | 49 | 4 | US-09-604-014A-22 | Sequence 22, Appl | c 923 | 11 | 55.0 | 30 | 3 | US-08-757-024-148  | Sequence 148, App     |
| c 851 | 11.2 | 56.0 | 50 | 1 | US-07-969-931-20  | Sequence 20, Appl | c 924 | 11 | 55.0 | 30 | 3 | US-09-405-267-16   | Sequence 16, Appl     |
| c 852 | 11.2 | 56.0 | 50 | 1 | US-07-855-417A-20 | Sequence 20, Appl | c 925 | 11 | 55.0 | 30 | 4 | US-08-974-549A-607 | Sequence 607, App     |
| c 853 | 11.2 | 56.0 | 50 | 2 | US-08-989-394-12  | Sequence 12, Appl | c 926 | 11 | 55.0 | 30 | 4 | US-09-411-291-3    | Sequence 3, Appl      |
| c 854 | 11.2 | 56.0 | 50 | 3 | US-08-464-903-42  | Sequence 42, Appl | c 927 | 11 | 55.0 | 30 | 4 | US-09-411-291-5    | Sequence 5, Appl      |
| c 855 | 11.2 | 56.0 | 50 | 4 | US-09-271-465-12  | Sequence 12, Appl | c 928 | 11 | 55.0 | 30 | 4 | US-09-052-919-5    | Sequence 5, Appl      |
| c 856 | 11.2 | 56.0 | 50 | 4 | US-09-199-290-23  | Sequence 23, Appl | c 929 | 11 | 55.0 | 31 | 1 | US-08-145-704-13   | Sequence 13, Appl     |
| c 857 | 11.2 | 56.0 | 50 | 4 | US-09-298-886-19  | Sequence 19, Appl | c 930 | 11 | 55.0 | 31 | 1 | US-08-467-126-4    | Sequence 4, Appl      |
| c 858 | 11.2 | 56.0 | 50 | 4 | US-07-935-695-42  | Sequence 42, Appl | c 931 | 11 | 55.0 | 31 | 3 | US-08-757-024-108  | Sequence 108, App     |
| c 859 | 11.2 | 56.0 | 50 | 4 | US-09-604-014A-12 | Sequence 12, Appl | c 932 | 11 | 55.0 | 31 | 3 | US-08-947-574-13   | Sequence 13, Appl     |
| c 860 | 11.2 | 56.0 | 50 | 5 | PCT-US95-13975-59 | Sequence 59, Appl | c 933 | 11 | 55.0 | 31 | 4 | US-08-535-168-13   | Sequence 13, Appl     |
| c 861 | 11   | 55.0 | 11 | 3 | US-08-757-024-737 | Sequence 737, App | c 934 | 11 | 55.0 | 31 | 4 | US-09-017-974-13   | Sequence 13, Appl     |
| c 862 | 11   | 55.0 | 11 | 3 | US-08-757-024-747 | Sequence 747, App | c 935 | 11 | 55.0 | 31 | 4 | US-08-682-256A-13  | Sequence 13, Appl     |
| c 863 | 11   | 55.0 | 11 | 3 | US-08-757-024-755 | Sequence 755, App | c 936 | 11 | 55.0 | 31 | 4 | US-09-429-130-13   | Sequence 13, Appl     |
| c 864 | 11   | 55.0 | 12 | 3 | US-08-757-024-697 | Sequence 697, App | c 937 | 11 | 55.0 | 31 | 5 | PCT-US96-11786-13  | Sequence 13, Appl     |
| c 865 | 11   | 55.0 | 12 | 3 | US-08-757-024-754 | Sequence 754, App | c 938 | 11 | 55.0 | 32 | 1 | US-08-145-511-1    | Sequence 1, Appl      |
| c 866 | 11   | 55.0 | 13 | 3 | US-08-757-024-675 | Sequence 675, App | c 939 | 11 | 55.0 | 32 | 1 | US-08-464-342-21   | Sequence 21, Appl     |
| c 867 | 11   | 55.0 | 14 | 3 | US-08-757-024-652 | Sequence 652, App | c 940 | 11 | 55.0 | 32 | 1 | US-08-187-453-1    | Sequence 1, Appl      |
| c 868 | 11   | 55.0 | 15 | 1 | US-08-580-242-5   | Sequence 5, Appl  | c 941 | 11 | 55.0 | 32 | 2 | US-08-464-604A-24  | Sequence 24, Appl     |
| c 869 | 11   | 55.0 | 15 | 3 | US-08-757-024-628 | Sequence 628, App | c 942 | 11 | 55.0 | 32 | 2 | US-08-875-272-21   | Sequence 21, Appl     |
| c 870 | 11   | 55.0 | 16 | 3 | US-08-757-024-603 | Sequence 603, App | c 943 | 11 | 55.0 | 32 | 2 | US-08-903-496-21   | Sequence 21, Appl     |
| c 871 | 11   | 55.0 | 17 | 3 | US-08-757-024-577 | Sequence 577, App | c 944 | 11 | 55.0 | 32 | 2 | US-08-757-024-67   | Sequence 67, Appl     |
| c 872 | 11   | 55.0 | 18 | 3 | US-08-757-024-550 | Sequence 550, App | c 945 | 11 | 55.0 | 32 | 3 | US-08-986-331-6    | Sequence 6, Appl      |
| c 873 | 11   | 55.0 | 19 | 1 | US-08-476-362A-6  | Sequence 6, Appl  | c 946 | 11 | 55.0 | 32 | 5 | US-08-462-509B-11  | Sequence 11, Appl     |
| c 874 | 11   | 55.0 | 19 | 3 | US-08-757-024-522 | Sequence 522, App | c 947 | 11 | 55.0 | 32 | 5 | PCT-US95-05616-11  | Sequence 11, Appl     |
| c 875 | 11   | 55.0 | 20 | 1 | US-08-104-073-7   | Sequence 7, Appl  | c 948 | 11 | 55.0 | 33 | 1 | US-08-464-342-15   | Sequence 15, Appl     |
| c 876 | 11   | 55.0 | 20 | 1 | US-08-487-141B-17 | Sequence 17, Appl | c 949 | 11 | 55.0 | 33 | 1 | US-08-634-060-52   | Sequence 52, Appl     |
| c 877 | 11   | 55.0 | 20 | 3 | US-08-927-561-17  | Sequence 17, Appl | c 950 | 11 | 55.0 | 33 | 2 | US-08-464-604A-18  | Sequence 18, Appl     |
| c 878 | 11   | 55.0 | 20 | 3 | US-08-757-024-493 | Sequence 493, App | c 951 | 11 | 55.0 | 33 | 2 | US-08-875-272-15   | Sequence 15, App      |
| c 879 | 11   | 55.0 | 20 | 3 | US-09-049-020-4   | Sequence 493, App | c 952 | 11 | 55.0 | 33 | 2 | US-08-903-496-15   | Sequence 15, Appl     |
| c 880 | 11   | 55.0 | 20 | 4 | US-09-517-584A-60 | Sequence 60, Appl | c 953 | 11 | 55.0 | 33 | 3 | US-08-757-024-25   | Sequence 25, Appl     |
| c 881 | 11   | 55.0 | 20 | 4 | US-09-115-027-3   | Sequence 3, Appl  | c 954 | 11 | 55.0 | 33 | 4 | US-08-986-049-2    | Sequence 2, Appl      |
| c 882 | 11   | 55.0 | 20 | 4 | US-09-303-586-23  | Sequence 23, Appl | c 955 | 11 | 55.0 | 33 | 4 | US-08-169-715-42   | Sequence 42, Appl     |
| c 883 | 11   | 55.0 | 20 | 5 | PCT-US96-09388-17 | Sequence 17, Appl | c 956 | 11 | 55.0 | 35 | 1 | US-08-087-772A-11  | Sequence 11, Appl     |
| c 884 | 11   | 55.0 | 21 | 1 | US-07-952-442-3   | Sequence 3, Appl  | c 957 | 11 | 55.0 | 36 | 3 | US-08-833-167-14   | Sequence 14, Appl     |
| c 885 | 11   | 55.0 | 21 | 1 | US-08-269-766-3   | Sequence 3, Appl  | c 958 | 11 | 55.0 | 36 | 4 | US-09-382-616A-26  | Sequence 26, Appl     |
| c 886 | 11   | 55.0 | 21 | 1 | US-08-319-545A-3  | Sequence 3, Appl  | c 959 | 11 | 55.0 | 36 | 4 | US-09-382-616A-28  | Sequence 28, Appl     |
| c 887 | 11   | 55.0 | 21 | 2 | US-08-909-868-1   | Sequence 2, Appl  | c 960 | 11 | 55.0 | 36 | 4 | US-09-344-847A-14  | Sequence 14, Appl     |
| c 888 | 11   | 55.0 | 21 | 2 | US-08-909-868-2   | Sequence 2, Appl  | c 961 | 11 | 55.0 | 37 | 4 | US-09-124-541-13   | Sequence 13, Appl     |
| c 889 | 11   | 55.0 | 21 | 2 | US-09-092-988-3   | Sequence 3, Appl  | c 962 | 11 | 55.0 | 39 | 1 | US-08-225-989-9    | Sequence 9, Appl      |
| c 890 | 11   | 55.0 | 21 | 3 | US-08-757-024-463 | Sequence 463, App | c 963 | 11 | 55.0 | 39 | 1 | US-08-570-923-9    | Sequence 9, Appl      |
| c 891 | 11   | 55.0 | 21 | 3 | US-09-106-216-3   | Sequence 3, Appl  | c 964 | 11 | 55.0 | 39 | 1 | US-08-580-014-9    | Sequence 9, Appl      |
| c 892 | 11   | 55.0 | 21 | 4 | US-09-429-034-3   | Sequence 3, Appl  | c 965 | 11 | 55.0 | 39 | 3 | US-09-079-785-9    | Sequence 9, Appl      |
| c 893 | 11   | 55.0 | 22 | 3 | US-08-757-024-432 | Sequence 432, App | c 966 | 11 | 55.0 | 40 | 2 | US-08-850-049-120  | Sequence 120, App     |
| c 894 | 11   | 55.0 | 23 | 2 | US-08-747-536-15  | Sequence 15, Appl | c 967 | 11 | 55.0 | 40 | 2 | US-08-050-478-120  | Sequence 120, App     |
| c 895 | 11   | 55.0 | 23 | 3 | US-08-757-024-400 | Sequence 400, App | c 968 | 11 | 55.0 | 40 | 4 | US-09-374-135-11   | Sequence 11, Appl     |
| c 896 | 11   | 55.0 | 24 | 3 | US-08-729-598-7   | Sequence 7, Appl  | c 969 | 11 | 55.0 | 40 | 4 | US-09-414-117-120  | Sequence 120, Appl    |
| c 897 | 11   | 55.0 | 24 | 3 | US-08-757-024-467 | Sequence 467, App | c 970 | 11 | 55.0 | 40 | 4 | US-09-678-437-120  | Sequence 120, App     |
| c 898 | 11   | 55.0 | 25 | 1 | US-08-247-946A-10 | Sequence 10, Appl | c 971 | 11 | 55.0 | 40 | 4 | US-08-476-866-6    | Sequence 6, Appl      |
| c 899 | 11   | 55.0 | 25 | 3 | US-08-757-024-333 | Sequence 333, App | c 972 | 11 | 55.0 | 42 | 2 | US-08-910-733-6    | Sequence 6, Appl      |
| c 900 | 11   | 55.0 | 25 | 3 | US-08-911-894-23  | Sequence 23, App  | c 973 | 11 | 55.0 | 42 | 2 | US-08-910-733-6    | Sequence 6, Appl      |
| c 901 | 11   | 55.0 | 26 | 2 | US-08-403-8520-48 | Sequence 48, Appl | c 974 | 11 | 55.0 | 42 | 4 | US-08-448-619-4    | Sequence 4, Appl      |
| c 902 | 11   | 55.0 | 26 | 3 | US-08-757-024-298 | Sequence 298, App | c 975 | 11 | 55.0 | 42 | 4 | US-09-323-874A-24  | Sequence 24, Appl     |
| c 903 | 11   | 55.0 | 26 | 3 | US-08-510-646A-40 | Sequence 40, Appl | c 976 | 11 | 55.0 | 42 | 4 | US182196-21        | Patent No. 5182196-21 |

977 11 55.0 44 3 US-09-284-782-6 Sequence 6, Appl  
 978 11 55.0 44 3 US-09-284-782-14 Sequence 14, Appl  
 c 979 11 55.0 45 1 US-08-171-389-291 Sequence 291, App  
 c 980 11 55.0 45 1 US-08-123-946-291 Sequence 291, App  
 c 981 11 55.0 45 2 US-08-475-228A-291 Sequence 291, App  
 c 982 11 55.0 45 3 US-08-482-080A-291 Sequence 291, App  
 c 983 11 55.0 45 4 US-09-454-947-291 Sequence 291, App  
 c 984 11 55.0 45 5 PCT-US93-12488-291 Sequence 291, App  
 c 985 11 55.0 46 4 US-09-690-867A-49 Sequence 49, Appl  
 c 986 11 55.0 46 4 US-09-548-260-49 Sequence 49, Appl  
 c 987 11 55.0 47 4 US-09-641-648-1298 Sequence 1298, Ap  
 c 988 11 55.0 48 1 US-08-634-060-49 Sequence 49, Appl  
 c 989 11 55.0 48 4 US-09-518-914-23 Sequence 23, Appl  
 c 990 11 55.0 50 1 US-08-171-389-374 Sequence 374, App  
 c 991 11 55.0 50 1 US-08-171-389-573 Sequence 573, App  
 c 992 11 55.0 50 1 US-08-171-389-574 Sequence 574, App  
 c 993 11 55.0 50 1 US-08-124-946-474 Sequence 474, App  
 c 994 11 55.0 50 1 US-08-123-946-573 Sequence 573, App  
 c 995 11 55.0 50 1 US-08-123-946-574 Sequence 574, App  
 c 996 11 55.0 50 2 US-08-475-228A-474 Sequence 474, App  
 c 997 11 55.0 50 2 US-08-475-228A-573 Sequence 573, App  
 c 998 11 55.0 50 2 US-08-475-228A-574 Sequence 574, App  
 c 999 11 55.0 50 3 US-08-482-080A-474 Sequence 474, App  
 c1000 11 55.0 50 3 US-08-482-080A-573 Sequence 573, App

## ALIGNMENTS

RESULT 1  
 US 08 241 472 7/c  
 : Sequence 1, Application US/08241472  
 : Patent No. 5641247  
 : GENERAL INFORMATION:  
 : APPLICANT: Kameda, Yasutami  
 : APPLICANT: Ozawa, Victor J  
 : TITLE OF INVENTION: METHOD FOR IN VIVO DELIVERY OF  
 : TITLE OF INVENTION: THERAPEUTIC AGENTS VIA LIPIDOMES  
 : NUMBER OF SEQUENCES: 34  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: FLEHR, HUBACH, TEST, ALBRITTON & HERBERT  
 : STREET: 4 Embrocadero Center, Suite 4400  
 : CITY: San Francisco  
 : STATE: California  
 : COUNTRY: USA  
 : ZIP: 94111-4187  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: Patent In Release #1.0, Version #1.25  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/241, 472  
 : FILING DATE: 09 MAY 1994  
 : CLASSIFICATION: 514  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: Rowland, William I  
 : REGISTRATION NUMBER: 20,015  
 : REFERENCE/DOCKET NUMBER: A 59079-1/BR  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: (415) 781-1989  
 : TELEX: 910 277299  
 : INFORMATION FOR SEQ ID NO: 7:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 24 base pairs  
 : TYPE: nucleic acid  
 : STRANDEDNESS: single  
 : TOPOLOGY: linear  
 : MOLECULE TYPE: cDNA  
 US 08 241 472 7

Query Match 100.0% Score 20; DB 1; Length 24;

Best Local Similarity 100.0% Prod. No. 5,22;  
 Matches 20; Conservative 0; Mismatches 0; Gaps 0;  
 QY 1 GAGGAGGAGATGGGAGAGG 20  
 111111111111111111111111  
 DB 20 GAGGAGGAGATGGGAGAGG 1  
 111111111111111111111111  
 RESULT 2  
 US 08 110 294A 1/c  
 : Sequence 1, Application US/08110294A  
 : Patent No. 5821234  
 : GENERAL INFORMATION:  
 : APPLICANT: Ozawa, Victor J  
 : TITLE OF INVENTION: Inhibition of Proliferation of Vascular  
 : TITLE OF INVENTION: Smooth Muscle Cell  
 : NUMBER OF SEQUENCES: 49  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: Alletetti & Witcoff, Ltd.  
 : STREET: 10 South Wacker Dr.  
 : CITY: Chicago  
 : STATE: IL  
 : COUNTRY: USA  
 : ZIP: 60606  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: Patent In Release #1.0, Version #1.26  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/110, 294A  
 : FILING DATE: 20 AUG 1993  
 : CLASSIFICATION: 514  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/063,980  
 : FILING DATE: 19 MAY 1993  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 07/944,882  
 : FILING DATE: 10 SEP 1992  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: McQuinn-J, John J  
 : REGISTRATION NUMBER: 26,949  
 : REFERENCE/DOCKET NUMBER: 93,510 B  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: 312 715, 1000  
 : TELEX: 312 715, 1234  
 : INFORMATION FOR SEQ ID NO: 1:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 24 base pairs  
 : TYPE: nucleic acid  
 : STRANDEDNESS: single  
 : TOPOLOGY: linear  
 : MOLECULE TYPE: mRNA  
 US 08 110-294A 1  
 Query Match 100.0% Score 20; DB 1; Length 24;  
 Best Local Similarity 100.0% Prod. No. 5,22;  
 Matches 20; Conservative 0; Mismatches 0; Gaps 0;  
 QY 1 GAGGAGGAGATGGGAGAGG 20  
 111111111111111111111111  
 DB 20 GAGGAGGAGATGGGAGAGG 1  
 111111111111111111111111  
 RESULT 3  
 US 08 489 926 1/c  
 : Sequence 1, Application US/08489926  
 : Patent No. 6865442  
 : GENERAL INFORMATION:  
 : APPLICANT: Ozawa, Victor J  
 : TITLE OF INVENTION: Inhibition of Proliferation of Vascular  
 : TITLE OF INVENTION: Smooth Muscle Cell  
 : NUMBER OF SEQUENCES: 54



Best Local Similarity 100.0%; Seed, No. 43;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 GAGGAGGATGAGGAGGAGG 20  
DB 18 GAGGAGGATGAGGAGGAGG 1

RESULT 6  
US 08 860 299 1  
Sequence 1, Application US/08860299  
Patent No. 5958774  
GENERAL INFORMATION:  
APPLICANT: KLEIN, Antoinette  
APPLICANT: HATZFELD, Jacques  
TITLE OF INVENTION: Method for gene transfer into cells Activated from a  
FILE REFERENCE: KLEIN et al., 08/860,299  
CURRENT APPLICATION NUMBER: US/08/860,299  
CURRENT FILING DATE: 1998 07 10  
EARLIER APPLICATION NUMBER: FR 94/15497  
EARLIER FILING DATE: 1994 12 22  
EARLIER APPLICATION NUMBER: PCT/FR95/01691  
EARLIER FILING DATE: 1995 12 18  
NUMBER OF SEQ ID NOS: 1  
SOFTWARE: Patent In Ver. 2.0  
SEQ ID NO 1  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Unknown  
FEATURE:  
OTHER INFORMATION: Description of Unknown organism: NONE  
US-08-860 299 1

Query Match 85.0%; Score 17; DB 2; Length 21;  
Best Local Similarity 100.0%; Seed, No. 82;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGAGGATGAGGAGGAG 17  
DB 5 GAGGAGGATGAGGAGGAG 21

RESULT 7  
US 09 287 623 1  
Sequence 1, Application US/09287623  
Patent No. 6225044  
GENERAL INFORMATION:  
APPLICANT: KLEIN, Antoinette  
APPLICANT: HATZFELD, Jacques  
TITLE OF INVENTION: Method for gene transfer into cells Activated from a  
FILE REFERENCE: KLEIN et al., 08/860,299  
CURRENT APPLICATION NUMBER: US/09/287,623  
CURRENT FILING DATE: 1999-04 07  
EARLIER APPLICATION NUMBER: FR 94/15497  
EARLIER FILING DATE: 1994-12-22  
EARLIER APPLICATION NUMBER: PCT/FR95/01691  
EARLIER FILING DATE: 1995-12-18  
NUMBER OF SEQ ID NOS: 1  
SOFTWARE: Patent In Ver. 2.0  
SEQ ID NO 1  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Unknown  
FEATURE:  
OTHER INFORMATION: Description of Unknown organism: UNKNOWN  
US 09-287 623 1

Query Match 85.0%; Score 17; DB 4; Length 21;  
Best Local Similarity 100.0%; Seed, No. 82;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GAGGAGGATGAGGAGGAG 17  
DB 5 GAGGAGGATGAGGAGGAG 21

RESULT 8  
US 08 445 050 19  
Sequence 19, Application US/08445050  
Patent No. 5763739  
GENERAL INFORMATION:  
APPLICANT: Blackberr, Lars  
APPLICANT: Edlund, Michael  
APPLICANT: Hansson, Leifmarit  
APPLICANT: Jonnell, Olof  
APPLICANT: Lundberg, Leifmarit  
APPLICANT: Stromqvist, Mats  
APPLICANT: Tjernell, Jan  
TITLE OF INVENTION: No. 5/637 990: polypeptides  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: White & Case  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: United States  
ZIP: 10036 2787  
COMPIER RELEASABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPIER: IBM PC compatible  
OPERATING SYSTEM: pc DOS/MS DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/445,050  
FILING DATE:  
CLASSIFICATION: B00  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/204,691  
FILING DATE:  
APPLICATION NUMBER: SE 9400686 4  
FILING DATE: 01 MAR 1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: SE 9400722 7  
FILING DATE: 04 MAR 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Stenert Ph.D., Richard J  
REGISTRATION NUMBER: 35,472  
REFERENCE/BOOKLET NUMBER: 110426 850  
BIBLIOGRAPHIC INFORMATION:  
TELEPHONE: (212) 619 8784  
TELEFAX: (212) 654 8114  
INFORMATION FOR SEQ ID NO: 19;  
SEQUENCE CHARACTERISTICS:  
LENGTH: 42 base pairs  
TYPE: nucleic acid  
STRANDNESS: single  
TOPLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-445-050 19

Query Match 76.0%; Score 15,2; DB 1; Length 42;  
Best Local Similarity 85.0%; Seed, No. 4; Z-score:  
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 GAGGAGGATGAGGAGGAG 20  
DB 8 GAGGAGGATGAGGAGGAG 27

RESULT 9  
US 08 204 691 19  
Sequence 19, Application US/08204691  
Patent No. 6827684  
GENERAL INFORMATION:

```

1 APPLICANT: Blackberg, Lars
2 APPLICANT: Edlund, Michael
3 APPLICANT: Hansson, Lennart
4 APPLICANT: Hornell, Olle
5 APPLICANT: Lundberg, Mats
6 APPLICANT: Stromqvist, Mats
7 APPLICANT: Toornell, Jan
8 TITLE OF INVENTION: No. 5827683ol Polypeptides
9 NUMBER OF SEQUENCES: 21
10 CORRESPONDENCE ADDRESS:
11 ADDRESSEE: White & Case
12 STREET: 1155 Avenue of the Americas
13 CITY: New York
14 STATE: New York
15 COUNTRY: United States
16 ZIP: 10036-2787
17 COMPUTER READABLE FORM:
18 MEDIUM TYPE: Floppy disk
19 COMPUTER: IBM PC compatible
20 OPERATING SYSTEM: PC-DOS/MS-DOS
21 SOFTWARE: Patent in Release #1.0, Version #1.25
22 CURRENT APPLICATION DATA:
23 APPLICATION NUMBER: US/08/204,691
24 FILING DATE:
25 CLASSIFICATION: 435
26 PRIOR APPLICATION DATA:
27 APPLICATION NUMBER: SE 9400686-4
28 FILING DATE: 01-MAR-1993
29 PRIOR APPLICATION DATA:
30 APPLICATION NUMBER: SE 9300722-7
31 FILING DATE: 04-MAR-1993
32 ATTORNEY/AGENT INFORMATION:
33 NAME: Stornier Ph.D., Richard J
34 REGISTRATION NUMBER: 35,372
35 REFERENCE/DOCKET NUMBER: 1103426-850
36 TELECOMMUNICATION INFORMATION:
37 TELEPHONE: (212)819-8783
38 TELEFAX: (212)354-8113
39 INFORMATION FOR SEQ ID NO: 19:
40 SEQUENCE CHARACTERISTICS:
41 LENGTH: 32 base pairs
42 TYPE: nucleic acid
43 STRANDEDNESS: single
44 TOPOLOGY: linear
45 MOLECULE TYPE: DNA (genomic)
46 US-08-204-691-19

```

```

Query Match 76.0%; Score 15.2; DB 1; Length 32;
Best Local Similarity 85.0%; Pred. No. 4.2e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

```

QY 1 GAGGAGGAGATGGGAGAGG 20
Db 8 GTGGGAGGATGGGAGAGG 27

```

```

RESULT 11
US-08-445-050-14/c
Sequence 14, Application US/08445050
Patent No. 5764749
GENERAL INFORMATION:

```

```

1 APPLICANT: Blackberg, Lars
2 APPLICANT: Edlund, Michael
3 APPLICANT: Hansson, Lennart
4 APPLICANT: Hornell, Olle
5 APPLICANT: Lundberg, Mats
6 APPLICANT: Stromqvist, Jan
7 APPLICANT: Toornell, Jan
8 TITLE OF INVENTION: No. 5764749ol Polypeptides
9 NUMBER OF SEQUENCES: 21
10 CORRESPONDENCE ADDRESS:
11 ADDRESSEE: White & Case
12 STREET: 1155 Avenue of the Americas

```

```

1 CITY: New York
2 STATE: New York
3 COUNTRY: United States
4 ZIP: 10036-2787
5 COMPUTER READABLE FORM:
6 MEDIUM TYPE: Floppy disk
7 COMPUTER: IBM PC compatible
8 OPERATING SYSTEM: PC-DOS/MS-DOS
9 SOFTWARE: Patent in Release #1.0, Version #1.25
10 CURRENT APPLICATION DATA:
11 APPLICATION NUMBER: US/08/445,050
12 FILING DATE:
13 CLASSIFICATION: B00
14 PRIOR APPLICATION DATA:
15 APPLICATION NUMBER: US/08/204,691
16 FILING DATE:
17 APPLICATION NUMBER: SE 9400686-4
18 FILING DATE: 01-MAR-1993
19 PRIOR APPLICATION DATA:
20 APPLICATION NUMBER: SE 9400722-7
21 FILING DATE: 04-MAR-1993
22 ATTORNEY/AGENT INFORMATION:
23 NAME: Stornier Ph.D., Richard J
24 REGISTRATION NUMBER: 35,372
25 REFERENCE/DOCKET NUMBER: 1103426-850
26 TELECOMMUNICATION INFORMATION:
27 TELEPHONE: (212)819-8783
28 TELEFAX: (212)354-8113
29 INFORMATION FOR SEQ ID NO: 14:
30 SEQUENCE CHARACTERISTICS:
31 LENGTH: 32 base pairs
32 TYPE: nucleic acid
33 STRANDEDNESS: single
34 TOPOLOGY: linear
35 MOLECULE TYPE: DNA (genomic)
36 US-08-445-050-14

```

```

Query Match 76.0%; Score 15.2; DB 1; Length 42;
Best Local Similarity 85.0%; Pred. No. 4.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY 1 GAGGAGGAGATGGGAGAGG 20
Db 29 GTGGGAGGATGGGAGAGG 10

```

```

RESULT 11
US-08-204-691-14/c
Sequence 14, Application US/08204691
Patent No. 5827683
GENERAL INFORMATION:
1 APPLICANT: Blackberg, Lars
2 APPLICANT: Edlund, Michael
3 APPLICANT: Hansson, Lennart
4 APPLICANT: Hornell, Olle
5 APPLICANT: Lundberg, Lennart
6 APPLICANT: Stromqvist, Mats
7 APPLICANT: Toornell, Jan
8 TITLE OF INVENTION: No. 5827683ol Polypeptides
9 NUMBER OF SEQUENCES: 21
10 CORRESPONDENCE ADDRESS:
11 ADDRESSEE: White & Case
12 STREET: 1155 Avenue of the Americas
13 CITY: New York
14 STATE: New York
15 COUNTRY: United States
16 ZIP: 10036-2787
17 COMPUTER READABLE FORM:
18 MEDIUM TYPE: Floppy disk
19 COMPUTER: IBM PC compatible
20 OPERATING SYSTEM: PC-DOS/MS-DOS
21 SOFTWARE: Patent in Release #1.0, Version #1.25
22 CURRENT APPLICATION DATA:

```

```

1 APPLICATION NUMBER: US/08/204,691
2 FILING DATE:
3 CLASSIFICATION: 435
4 PRIOR APPLICATION DATA:
5 APPLICATION NUMBER: SE 9400686 4
6 FILING DATE: 01 MAR 1993
7 PRIOR APPLICATION DATA:
8 APPLICATION NUMBER: SE 9400722 7
9 FILING DATE: 04 MAR 1993
10 ATTORNEY/AGENT INFORMATION:
11 NAME: Stetner Ph.D., Richard J
12 REGISTRATION NUMBER: 45,472
13 REFERENCE/POCKET NUMBER: 1103426 850
14 TELECOMMUNICATION INFORMATION:
15 TELEPHONE: (212)819-8783
16 TELEFAX: (212)354-8113
17 INFORMATION FOR SEQ ID NO: 14:
18 LENGTH: 42 base pairs
19 TYPE: nucleic acid
20 STRANDEDNESS: single
21 TOPOLOGY: linear
22 MOLECULE TYPE: DNA (genomic)
23 US 08 204 691 14

```

```

Query Match 76.0% Score 15.2; DB 1; Length 42;
Best Local Similarity 85.0%; Pred. No. 4,1002;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY 1 GAGGGGATGGGAGGAGG 20
10 111111111111111111
20 GTGGGGGAGGAGGAGGAGG 10

```

```

RESULT 12
US 08 445 050-15/c
1 Sequence 15, Application US/08445050
2 Patent No. 5763749
3 GENERAL INFORMATION:
4 APPLICANT: Blackbuck, Lars
5 APPLICANT: Edlund, Michael
6 APPLICANT: Hansson, Leonard
7 APPLICANT: Bernell, Olo
8 APPLICANT: Lundberg, Leonard
9 APPLICANT: Stromqvist, Mats
10 TITLE OF INVENTION: No. 5763749 Polypeptides
11 NUMBER OF SEQUENCES: 21
12 CORRESPONDENCE ADDRESS:
13 ADDRESSEE: White & Case
14 STREET: 1155 Avenue of the Americas
15 CITY: New York
16 STATE: New York
17 COUNTRY: United States
18 ZIP: 10036, 2787
19 COMPUTER READABLE FORM:
20 MEDIUM TYPE: Floppy disk
21 COMPUTER: IBM PC compatible
22 OPERATING SYSTEM: PC-DOS/MS DOS
23 SOFTWARE: Patent in Release #1.0, Version #1.25
24 CURRENT APPLICATION DATA:
25 FILING DATE:
26 APPLICATION NUMBER: US/08/445,050
27 CLASSIFICATION: 800
28 PRIOR APPLICATION DATA:
29 APPLICATION NUMBER: US/08/204,691
30 FILING DATE:
31 APPLICATION NUMBER: SE 9400686 4
32 FILING DATE: 01 MAR 1993
33 PRIOR APPLICATION DATA:
34 APPLICATION NUMBER: SE 9400722 7
35 FILING DATE: 04 MAR 1993
36 ATTORNEY/AGENT INFORMATION:

```

```

1 NAME: Stetner Ph.D., Richard J
2 REGISTRATION NUMBER: 45,472
3 REFERENCE/POCKET NUMBER: 1103426 850
4 TELECOMMUNICATION INFORMATION:
5 TELEPHONE: (212)819-8783
6 TELEFAX: (212)354-8113
7 INFORMATION FOR SEQ ID NO: 15:
8 SEQUENCE CHARACTERISTICS:
9 LENGTH: 43 base pairs
10 TYPE: nucleic acid
11 STRANDEDNESS: single
12 TOPOLOGY: linear
13 MOLECULE TYPE: DNA (genomic)
14 US 08 445 050 15

```

```

Query Match 76.0% Score 15.2; DB 1; Length 43;
Best Local Similarity 85.0%; Pred. No. 4,1002;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY 1 GAGGGGATGGGAGGAGG 20
10 111111111111111111
20 GTGGGGGAGGAGGAGGAGG 1

```

```

RESULT 13
US 08 204 691 15/c
1 Sequence 15, Application US/08204691
2 Patent No. 5827683
3 GENERAL INFORMATION:
4 APPLICANT: Blackbuck, Lars
5 APPLICANT: Edlund, Michael
6 APPLICANT: Hansson, Leonard
7 APPLICANT: Bernell, Olo
8 APPLICANT: Lundberg, Leonard
9 APPLICANT: Stromqvist, Mats
10 TITLE OF INVENTION: No. 5827683 Polypeptides
11 NUMBER OF SEQUENCES: 21
12 CORRESPONDENCE ADDRESS:
13 ADDRESSEE: White & Case
14 STREET: 1155 Avenue of the Americas
15 CITY: New York
16 STATE: New York
17 COUNTRY: United States
18 ZIP: 10036, 2787
19 COMPUTER READABLE FORM:
20 MEDIUM TYPE: Floppy disk
21 COMPUTER: IBM PC compatible
22 OPERATING SYSTEM: PC-DOS/MS DOS
23 SOFTWARE: Patent in Release #1.0, Version #1.25
24 CURRENT APPLICATION DATA:
25 APPLICATION NUMBER: US/08/204,691
26 FILING DATE:
27 CLASSIFICATION: 435
28 PRIOR APPLICATION DATA:
29 APPLICATION NUMBER: SE 9400686 4
30 FILING DATE: 01 MAR 1993
31 PRIOR APPLICATION DATA:
32 APPLICATION NUMBER: SE 9400722 7
33 FILING DATE: 04 MAR 1993
34 ATTORNEY/AGENT INFORMATION:
35 NAME: Stetner Ph.D., Richard J
36 REGISTRATION NUMBER: 45,472
37 REFERENCE/POCKET NUMBER: 1103426 850
38 TELECOMMUNICATION INFORMATION:
39 TELEPHONE: (212)819-8783
40 TELEFAX: (212)354-8113
41 INFORMATION FOR SEQ ID NO: 15:
42 SEQUENCE CHARACTERISTICS:
43 LENGTH: 43 base pairs
44 TYPE: nucleic acid
45 STRANDEDNESS: single
46 TOPOLOGY: linear

```



MOLECULE TYPE: DNA (genomic)  
US-08-340-558-9/c

Query Match 76.0%; Score 15.2; DB 1; Length 43;  
Best Local Similarity 85.0%; Pred. No. 4.1e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 GAGGGGCGATGGGGAGGC 20  
DB 20 GTGGGCGGCAAGGGGGGC 1

## RESULT 14

US-08-340-558-9/c  
Sequence 9, Application US/08340558

Patent No. 5538848

## GENERAL INFORMATION:

APPLICANT: Kenneth J. Livak, Susan J.A. Flood, Jeffery Marmaro  
TITLE OF INVENTION: Fluorescent probe for use in nucleic acid amplification assays

NUMBER OF SEQUENCES: 12

CORRESPONDENCE ADDRESS:

ADDRESSEE: Stephen C. Macevitz, Perkin-Elmer Corp., Applied Biosystems Division

STREET: 850 Lincoln Centre Drive

CITY: Foster City

STATE: California

COUNTRY: USA

ZIP: 94404

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch diskette

COMPUTER: IBM compatible

OPERATING SYSTEM: Windows 3.1/DOS 5.0

SOFTWARE: Microsoft Word for Windows, vers. 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/340,558

FILING DATE: 16-NOV-94

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Stephen C. Macevitz

REGISTRATION NUMBER: 30,285

REFERENCE/DOCKET NUMBER: 4264

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 638-5552

TELEFAX: (415) 638-6071

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 26 nucleotides

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-340-558-9

Query Match 74.0%; Score 14.8; DB 1; Length 26;

Best Local Similarity 88.9%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGGGGATGGGGAGG 19

DB 22 AGGATGGGATGGGGAGG 5

## RESULT 15

US-08-710-075-1/c

Sequence 1, Application US/08710075

Patent No. 5691146

## GENERAL INFORMATION:

APPLICANT: Paul E. Mayrand

TITLE OF INVENTION: Methods and reagents for combined PCR

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSEE: Paul D. Grossman, Perkin-Elmer Corp., Applied

Biosystems Divi

STREET: 850 Lincoln Centre Drive

CITY: Foster City

STATE: California

COUNTRY: USA

ZIP: 94404

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch diskette

COMPUTER: IBM compatible

OPERATING SYSTEM: Windows 3.10/DOS 6.20

SOFTWARE: Microsoft Word for Windows, vers. 6.0C

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/710,075

FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/445,509

FILING DATE: 05 MAY 1995

ATTORNEY/AGENT INFORMATION:

NAME: Paul D. Grossman

REGISTRATION NUMBER: 36,547

REFERENCE/DOCKET NUMBER: 427301

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 638-5846

TELEFAX: (415) 638-6071

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 26 nucleotides

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-710-075-1

Query Match 74.0%; Score 14.8; DB 1; Length 26;

Best Local Similarity 88.9%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGGGGGGATGGGGAGG 19

DB 22 AGGATGGGATGGGGAGG 5

## RESULT 16

US-08-559-405-9/c

Sequence 9, Application US/08559405

Patent No. 5724591

## GENERAL INFORMATION:

APPLICANT: Perkin-Elmer Corporation,

APPLICANT: Applied Biosystems Division

TITLE OF INVENTION: SELF-QUENCHING FLUORESCENCE PROBE

TITLE OF INVENTION: AND METHOD

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: David J. Weitz,

ADDRESSEE: Haynes & Davis

STREET: 2180 Sand Hill Road, Suite 310

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025-6935

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch diskette

COMPUTER: IBM compatible

OPERATING SYSTEM: Microsoft Windows 3.1/DOS 5.0

SOFTWARE: Wordperfect for windows 6.0,

SOFTWARE: ASCII (DOS) TEXT format

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/559,405

FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/440,558

FILING DATE: 16-NOV-94

ATTORNEY/AGENT INFORMATION:

NAME: David J. Wellz  
 REGISTRATION NUMBER: 48, 002  
 REFERENCE/DOCKET NUMBER: PELM4264-1P1  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 243 0188  
 TELEFAX: (415) 243-1129

INFORMATION FOR SEQ ID NO: 9:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 26 nucleotides  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear

US 08 559 405 9

Query Match 74.08% Score 14.8; DB 1; Length 26;  
 Best Local Similarity 88.98% Pred. No. 6, 1002;  
 Matches 16; Conservation 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGAGGAGATGGGAGG 19  
 III I I I I I I I I I I  
 DB 22 AGATGGATGGGAGG 5

# RESULT 17

US 08 657 989 4/c

Sequence 3, Application US/08657989

Patent No. 5736333

GENERAL INFORMATION:

APPLICANT: Lincoln J. McBride, Kenneth Livak

TITLE OF INVENTION: System for real time detection of nucleic acid amplification

NUMBER OF SEQUENCES: 3

CORRESPONDENCE ADDRESS:

ADDRESSEE: Scott R. Bortner, Perkin-Elmer, Inc.

STREET: 850 Lincoln Centre Drive

CITY: Foster City

STATE: California

COUNTRY: USA

ZIP: 94040

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch diskette

COMPUTER: IBM compatible

OPERATING SYSTEM: Windows 3.1/OS 5.0

SOFTWARE: Microsoft Word for Windows, v6.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/0857.989

FILING DATE: 04-JUN-96

CLASSIFICATION: 4.36

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Scott R. Bortner

REGISTRATION NUMBER: 44,298

REFERENCE/DOCKET NUMBER: 4410

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 638-6245

TELEFAX: (415) 638-6071

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 26 nucleotides

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

US 08 657 989 4

Query Match 74.08% Score 14.8; DB 1; Length 26;  
 Best Local Similarity 88.98% Pred. No. 6, 1002;  
 Matches 16; Conservation 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGAGGAGATGGGAGG 19  
 III I I I I I I I I I I  
 DB 22 AGATGGATGGGAGG 5

# RESULT 18

US 08 558 403 9/c

Sequence 6, Application US/08558403

Patent No. 5976940

GENERAL INFORMATION:

APPLICANT: Perkin Elmer Corporation,

ADDRESSEE: Applied Biosystems Division

TITLE OF INVENTION: HYBRIDIZATION ASSAY USING SELF

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: David J. Wellz,

ADDRESSEE: Hayes & Davis

STREET: 2180 Sand Hill Road, Suite 410

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025 6945

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch diskette

COMPUTER: IBM compatible

OPERATING SYSTEM: Microsoft Windows 3.1/OS 5.0

SOFTWARE: WordPerfect for Windows 6.0,

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08558,403

FILING DATE:

CLASSIFICATION: 4.36

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/440,558

FILING DATE: 16-NOV-94

ATTORNEY/AGENT INFORMATION:

NAME: David J. Wellz

REGISTRATION NUMBER: 48,462

REFERENCE/DOCKET NUMBER: PELM4264-1P2

TELEPHONE: (415) 243 0188

TELEFAX: (415) 243 1129

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 26 nucleotides

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

US 08 558 403 9

Query Match 74.08% Score 14.8; DB 2; Length 26;

Best Local Similarity 88.98% Pred. No. 6, 1002;

Matches 16; Conservation 0; Mismatches 2; Indels 0; Gaps 0;

QY 2 AGAGGAGATGGGAGG 19

III I I I I I I I I I I

DB 22 AGATGGATGGGAGG 5

# RESULT 19

US 08 752 974 3/c

Sequence 3, Application US/08752974

Patent No. 5929907

GENERAL INFORMATION:

APPLICANT: Timothy M. Wardenburg, Kevin S. Bodner, Charles R. Connolly, Alan M.

TITLE OF INVENTION: System for real time detection of nucleic acid amplification

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: Stephen C. Macevitz, Applied Biosystems, Inc.

STREET: 950 Lincoln Centre Drive

CITY: Foster City

STATE: California

COUNTRY: USA

ZIP: 94040

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch diskette

```

1  COMPUTER: IBM compatible
2  OPERATING SYSTEM: Windows 3.1/MS 5.0
3  SOFTWARE: Microsoft Word for Windows, vers. 2.0
4  CURRENT APPLICATION DATA:
5  APPLICATION NUMBER: US/08/752,973
6  FILING DATE: 02-09-1996
7  CLASSIFICATION: 435
8  PRIOR APPLICATION DATA:
9  APPLICATION NUMBER: 08/235,411
10 FILING DATE: 29-APR-94
11 ATTORNEY/AGENT INFORMATION:
12 NAME: Stephen C. Marcwicz
13 REGISTRATION NUMBER: 30,285
14 REFERENCE/DOCKET NUMBER: 4,241
15 TELECOMMUNICATION INFORMATION:
16 TELEPHONE: (415) 458-7855
17 TELEFAX: (415) 458-7794
18 INFORMATION FOR SEQ ID NO: 3:
19 SEQUENCE CHARACTERISTICS:
20 LENGTH: 26 nucleotides
21 TYPE: nucleic acid
22 STRANDEDNESS: single
23 TOPOLOGY: linear
24
25 US-08 752-973-3

```

```

Query Match 74.0%; Score 14.8; DB 2; Length 26;
Best Local Similarity 88.9%; Pred. No. 6.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGGGGGGATGGGGAGG 19
DB 22 AGGATGGGATGGGGAGG 5

```

## RESULT 20

```

US-08 639-224A-6/c
1 Sequence 6; Application US/08/639224A
2 Patent No. 6055268
3 GENERAL INFORMATION:
4 APPLICANT: E. N. Granados, S.R. Rouma, J.J. Carrino, N.A. Solomon
5 TITLE OF INVENTION: METHOD AND REAGENT FOR DETECTING MULTIPLE NUCLEIC ACID SEQUEN
6 NUMBER OF SEQUENCES: 10
7 CORRESPONDENCE ADDRESS:
8 ADDRESSEE: Abbott Laboratories
9 STREET: 100 Abbott Park Road
10 CITY: Abbott Park
11 STATE: Illinois
12 COUNTRY: USA
13 ZIP: 60064-3500
14 COMPUTER READABLE FORM:
15 MEDIUM TYPE: Floppy disk
16 COMPUTER: Macintosh
17 OPERATING SYSTEM: System 7.0.1
18 SOFTWARE: Microsoft Word 5.1a
19 CURRENT APPLICATION DATA:
20 APPLICATION NUMBER: US/08/639,224A
21 FILING DATE:
22 CLASSIFICATION: 435
23 ATTORNEY/AGENT INFORMATION:
24 NAME: Paul D. Yasor
25 REGISTRATION NUMBER: 37,477
26 REFERENCE/DOCKET NUMBER: 5949,US.01
27 TELECOMMUNICATION INFORMATION:
28 TELEPHONE: 708/908 4508
29 TELEFAX: 708/908 2623
30
31 INFORMATION FOR SEQ ID NO: 6:
32 SEQUENCE CHARACTERISTICS:
33 LENGTH: 26 base pairs
34 TYPE: nucleic acid
35 STRANDEDNESS: single
36 TOPOLOGY: linear
37 MOLECULE TYPE: synthetic DNA

```

```
US-08 639-224A 6
```

```

Query Match 74.0%; Score 14.8; DB 2; Length 26;
Best Local Similarity 88.9%; Pred. No. 6.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGGGGGGATGGGGAGG 19
DB 22 AGGATGGGATGGGGAGG 5

```

## RESULT 21

```

US-08 568-606-3/c
1 Sequence 3; Application US/08/568606
2 Patent No. 602,316
3 GENERAL INFORMATION:
4 APPLICANT: Kausa, Robert P.
5 APPLICANT: Wondolberg, Timothy M.
6 APPLICANT: Maritato, Jeffrey M.
7 TITLE OF INVENTION: Optical Tube and Method
8 NUMBER OF SEQUENCES: 4
9 CORRESPONDENCE ADDRESS:
10 ADDRESSEE: Dehlinger & Associates
11 STREET: 450 Cambridge Avenue, Suite 250
12 CITY: Palo Alto
13 STATE: CA
14 COUNTRY: USA
15 ZIP: 94306
16 COMPUTER READABLE FORM:
17 MEDIUM TYPE: Floppy disk
18 COMPUTER: IBM PC compatible
19 OPERATING SYSTEM: PC-DOS/MS-DOS
20 SOFTWARE: Patent In Release #1.0, Version #1.25
21 CURRENT APPLICATION DATA:
22 APPLICATION NUMBER: US/08/568,606
23 FILING DATE: 05-DEC 1995
24 CLASSIFICATION: 422
25 ATTORNEY/AGENT INFORMATION:
26 NAME: Stratford, Carol A.
27 REGISTRATION NUMBER: 34,444
28 REFERENCE/DOCKET NUMBER: 0550-0052
29 TELECOMMUNICATION INFORMATION:
30 TELEPHONE: (415) 424-0480
31 TELEFAX: (415) 424-0960
32 INFORMATION FOR SEQ ID NO: 4:
33 SEQUENCE CHARACTERISTICS:
34 LENGTH: 26 base pairs
35 TYPE: nucleic acid
36 STRANDEDNESS: single
37 TOPOLOGY: linear
38 MOLECULE TYPE: DNA (genomic)
39
40 US-08 568-606-3

```

```

Query Match 74.0%; Score 14.8; DB 2; Length 26;
Best Local Similarity 88.9%; Pred. No. 6.1e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGGGGGGATGGGGAGG 19
DB 22 AGGATGGGATGGGGAGG 5

```

## RESULT 22

```

US-08 046-114-4/c
1 Sequence 3; Application US/08/046114
2 Patent No. 6015674
3 GENERAL INFORMATION:
4 APPLICANT: Timothy M. Wondolberg, et al.
5 TITLE OF INVENTION: SYSTEM FOR REAL TIME DETECTION OF NOVEL ACID
6 NUMBER OF SEQUENCES: 4
7 CORRESPONDENCE ADDRESS:
8 ADDRESSEE: David J. Weitz, Wilson Sonsini Goodrich & Rossati

```

```

1 STREET: 650 Page Mill Road
2 CITY: Palo Alto
3 STATE: California
4 COUNTRY: USA
5 ZIP: 94304 1950
6 COMPUTER READABLE FORM:
7 MEDIUM TYPE: 3.5 inch diskette
8 COMPUTER: IBM compatible
9 OPERATING SYSTEM: Microsoft Windows 3.1/MS 5.0
10 SOFTWARE: Wordperfect for windows 6.0,
11 SOFTWARE: ASCII (DOS) TEXT format
12 CURRENT APPLICATION DATA:
13 APPLICATION NUMBER: US/09/046,114
14 FILING DATE:
15 CLASSIFICATION:
16 PRIOR APPLICATION DATA:
17 APPLICATION NUMBER: 08/235,411
18 FILING DATE: April 29, 1994
19 PRIOR APPLICATION DATA:
20 APPLICATION NUMBER: 08/752,974
21 FILING DATE: December 2, 1996
22 ATTORNEY/AGENT INFORMATION:
23 NAME: David J. Weitz
24 REGISTRATION NUMBER: 48,462
25 REFERENCE/PACKET NUMBER: 16642 745
26 TELECOMMUNICATION INFORMATION:
27 TELEPHONE: (650) 494 9400
28 TELEFAX: (650) 494 6811
29 INFORMATION FOR SEQ ID NO: 1:
30 SEQUENCE CHARACTERISTICS:
31 LENGTH: 26 nucleotides
32 TYPE: nucleic acid
33 STRANDNESS: single
34 TOPOLOGY: linear
35 US 09 046 114 4

```

```

Query Match 74.0% Score 14.8; DB 4; Length 26;
Best Local Similarity 88.9% Pred. No. 6,10002;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGAGGAGGATGGGAGG 19
111 111111111111
1b 22 AGATGAGATGGGAGG 5

```

```

RESULT 24
US 09 207 170A 96
1 Patent No. 6030767
2 GENERAL INFORMATION:
3 APPLICANT: Perkin Elmer Corporation
4 ATTORNEY/AGENT INFORMATION:
5 TITLE OF INVENTION: HYBRIDIZATION ASSAY USING SELF QUENCHING FID-RESCENCE PROBE
6 NUMBER OF SEQUENCES: 14
7 CORRESPONDENCE ADDRESS:
8 ADDRESSEE: David J. Weitz
9 ADDRESSEE: Haynes & Davis
10 STREET: 2180 Sand Hill Road, Suite 410
11 CITY: Menlo Park
12 STATE: California
13 COUNTRY: USA
14 ZIP: 94025 6945
15 COMPUTER READABLE FORM:
16 MEDIUM TYPE: 3.5 inch diskette
17 COMPUTER: IBM compatible
18 OPERATING SYSTEM: Microsoft Windows 3.1/MS 5.0
19 SOFTWARE: Wordperfect for windows 6.0,
20 SOFTWARE: ASCII (DOS) TEXT format
21 CURRENT APPLICATION DATA:
22 APPLICATION NUMBER: US/09/207,170A
23 FILING DATE:
24 CLASSIFICATION: 4.45
25 PRIOR APPLICATION DATA:

```

```

1 APPLICATION NUMBER: 08/340,508
2 FILING DATE: 16 NOV 94
3 ATTORNEY/AGENT INFORMATION:
4 NAME: David J. Weitz
5 REGISTRATION NUMBER: 48,462
6 REFERENCE/PACKET NUMBER: 16642 745
7 TELECOMMUNICATION INFORMATION:
8 TELEPHONE: (415) 233 0188
9 TELEFAX: (415) 233 1129
10 INFORMATION FOR SEQ ID NO: 9:
11 SEQUENCE CHARACTERISTICS:
12 LENGTH: 26 nucleotides
13 TYPE: nucleic acid
14 STRANDNESS: single
15 TOPOLOGY: linear
16 US 09 207 170A 9

```

```

Query Match 74.0% Score 14.8; DB 4; Length 26;
Best Local Similarity 88.9% Pred. No. 6,10002;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 2 AGAGGAGGATGGGAGG 19
111 111111111111
1b 22 AGATGAGATGGGAGG 5

```

```

RESULT 24
US 08 869 276 20
1 Sequence 20, Application US/08069,276
2 Patent No. 6174670
3 GENERAL INFORMATION:
4 APPLICANT: Witwer, Carl L.
5 ATTORNEY/AGENT INFORMATION:
6 APPLICANT: Kille, Kirk M.
7 APPLICANT: Kossmussen, Randy P.
8 TITLE OF INVENTION: Monitoring Hybridization Involving
9 NUMBER OF SEQUENCES: 27
10 CORRESPONDENCE ADDRESS:
11 ADDRESSEE: Thorpe, No. 6174670th & Westcott, L.L.P.
12 STREET: 9045 South 700 East, Suite 200
13 CITY: Sandy
14 STATE: Utah
15 COUNTRY: USA
16 ZIP: 84070
17 COMPUTER READABLE FORM:
18 MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb storage
19 COMPUTER: Toshiba 12150TDS
20 OPERATING SYSTEM: Windows 95
21 SOFTWARE: Word Perfect 7.0
22 CURRENT APPLICATION DATA:
23 APPLICATION NUMBER: US/08/869,276
24 FILING DATE:
25 CLASSIFICATION: 4.45
26 PRIOR APPLICATION DATA:
27 APPLICATION NUMBER: US 08/658,994
28 FILING DATE: 04 JUN 96
29 PRIOR APPLICATION DATA:
30 APPLICATION NUMBER: US 08/818,267
31 FILING DATE: 17 MAR 97
32 ATTORNEY/AGENT INFORMATION:
33 NAME: Alan J. Rowarth
34 REGISTRATION NUMBER: 46,654
35 REFERENCE/PACKET NUMBER: 8616,0117
36 TELECOMMUNICATION INFORMATION:
37 TELEPHONE: (801) 566 6644
38 TELEFAX: (801) 566 0750
39 INFORMATION FOR SEQ ID NO: 20:
40 SEQUENCE CHARACTERISTICS:
41 LENGTH: 26 base pairs
42 TYPE: nucleic acid
43 STRANDNESS: single stranded
44 TOPOLOGY: linear
45 US 08 869 276 20

```

Query Match: 74.0% Score 14.8; DB 4; Length 26;  
 Best Local Similarity: 88.9%; Pred. No. 6,1e+02;  
 Matches: 16; Conservative: 0; Mismatches: 2; Indels: 0; Gaps: 0;

QY 2 AGGAGGATGGGAGG 19  
 III |IIIIIIIIII  
 DB 22 AGGATGGATGGGAGG 5

RESULT 23  
 US-09-900-115-1-20/c  
 : Sequence 20, Application US/0963544  
 : Patent No. 6242079  
 : GENERAL INFORMATION:  
 : APPLICANT: MITTNER, Carl L.  
 : APPLICANT: RUTHE, Kirk M.  
 : APPLICANT: Rasmussen, Randy P.  
 : TITLE OF INVENTION: Monitoring Hybridization during PCR  
 : NUMBER OF SEQUENCES: 27  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: Thorpe, No. 6242079th & Western, L.L.P.,  
 : STREET: 9035 South 700 East, Suite 200  
 : CITY: Sandy  
 : STATE: Utah  
 : COUNTRY: USA  
 : ZIP: 84070  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb storage  
 : COMPUTER: Toshiba T2150PS  
 : OPERATING SYSTEM: Windows 95  
 : SOFTWARE: Word Perfect 7.0  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/09/645,444  
 : FILING DATE:  
 : CLASSIFICATION:  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: 08/869,276  
 : FILING DATE:  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/819,267  
 : FILING DATE: 17-MAR-97  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: Alan J. Howarth  
 : REGISTRATION NUMBER: 36,554  
 : REFERENCE/DOCKET NUMBER: 8616.C1P7  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: (801)566-6633  
 : TELEFAX: (801)566-0750  
 : INFORMATION FOR SEQ ID NO: 20:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 26 base pairs  
 : TYPE: nucleic acid  
 : STRANDEDNESS: single-stranded  
 : TOPOLOGY: Linear  
 : US-09-900-115-1-20

Query Match: 74.0% Score 14.8; DB 4; Length 26;  
 Best Local Similarity: 88.9%; Pred. No. 6,1e+02;  
 Matches: 16; Conservative: 0; Mismatches: 2; Indels: 0; Gaps: 0;

QY 2 AGGAGGATGGGAGG 19  
 III |IIIIIIIIII  
 DB 22 AGGATGGATGGGAGG 5

Search completed: March 18, 2003, 12:09:01  
 Job time: 31.1967 secs



GenCore version 5.1.4 p5\_4578  
copyright (c) 1993 - 2003 CompuGen Ltd.

cm nucleic - nucleic search, using sw model

Run on: March 18, 2003, 10:49:51 : Search time 470.02 Seconds  
(without alignments)  
1240.261 Million cell updates/sec

Title: US-09-900-115-5

Perfect score: 20

Sequence: 1 gcaacagttcttctccatg 20

Scoring table: IDENTIFY\_N02

Gapop 10.0, Gapext 1.0

Searched: 2054640 seqs, 14551402878 residues

Total number of hits satisfying chosen parameters: 841850

Minimum DB seq length: 0

Maximum hit seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

GenBank:

1: ab\_ba:\*  
2: ab\_hfq:\*  
3: ab\_in:\*  
4: ab\_on:\*  
5: ab\_ov:\*  
6: ab\_pat:\*  
7: ab\_ph:\*  
8: ab\_pl:\*  
9: ab\_pr:\*  
10: ab\_ro:\*  
11: ab\_sts:\*  
12: ab\_sy:\*  
13: ab\_un:\*  
14: ab\_vi:\*  
15: em\_ba:\*  
16: em\_fun:\*  
17: em\_hum:\*  
18: em\_in:\*  
19: em\_mu:\*  
20: em\_on:\*  
21: em\_or:\*  
22: em\_ov:\*  
23: em\_pat:\*  
24: em\_ph:\*  
25: em\_pl:\*  
26: em\_ro:\*  
27: em\_sts:\*  
28: em\_un:\*  
29: em\_vi:\*  
30: em\_hfq\_hum:\*  
31: em\_hfq\_inv:\*  
32: em\_hfq\_ber:\*  
33: em\_hfq\_mus:\*  
34: em\_hfq\_pla:\*  
35: em\_hfq\_rod:\*  
36: em\_hfq\_mam:\*  
37: em\_hfq\_vrt:\*  
38: em\_sy:\*  
39: em\_hfq\_hum:\*  
40: em\_hfq\_mus:\*  
41: em\_hfq\_others:\*

Prod. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

# SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------|
| 1          | 20    | 100.0       | 46     | 6     | 106215      |
| 2          | 20    | 100.0       | 46     | 6     | 108267      |
| 3          | 18.4  | 92.0        | 44     | 6     | A06666      |
| 4          | 15.8  | 79.0        | 49     | 6     | AX018547    |
| 5          | 15.8  | 79.0        | 39     | 6     | AX018623    |
| 6          | 15.8  | 79.0        | 43     | 6     | AX443467    |
| 7          | 15.8  | 79.0        | 43     | 6     | AX443468    |
| 8          | 15.8  | 79.0        | 46     | 6     | AX018546    |
| 9          | 15.8  | 79.0        | 46     | 6     | AX018622    |
| 10         | 13.8  | 69.0        | 20     | 6     | AK162485    |
| 11         | 13.8  | 69.0        | 21     | 6     | AK162486    |
| 12         | 13.8  | 69.0        | 21     | 6     | AK162487    |
| 13         | 13.4  | 67.0        | 21     | 6     | AX11225     |
| 14         | 13.4  | 67.0        | 21     | 6     | AX39550     |
| 15         | 13.4  | 67.0        | 33     | 6     | AX491222    |
| 16         | 13.4  | 67.0        | 33     | 6     | AX49547     |
| 17         | 13.4  | 67.0        | 36     | 6     | AX491223    |
| 18         | 13.4  | 67.0        | 36     | 6     | AX49548     |
| 19         | 13.4  | 67.0        | 39     | 6     | AX491224    |
| 20         | 13.4  | 67.0        | 39     | 6     | AX49549     |
| 21         | 13.2  | 66.0        | 19     | 6     | AX11206     |
| 22         | 13.2  | 66.0        | 39     | 6     | AX5893      |
| 23         | 13.2  | 66.0        | 39     | 6     | A79877      |
| 24         | 13.2  | 66.0        | 39     | 6     | AK127815    |
| 25         | 13.2  | 66.0        | 48     | 6     | 190209      |
| 26         | 12.8  | 64.0        | 27     | 6     | AX026017    |
| 27         | 12.8  | 64.0        | 29     | 6     | EL3898      |
| 28         | 12.8  | 64.0        | 45     | 6     | AX077050    |
| 29         | 12.8  | 64.0        | 45     | 6     | AX201411    |
| 30         | 12.8  | 64.0        | 45     | 6     | AX211601    |
| 31         | 12.8  | 64.0        | 45     | 9     | HS18K3X22   |
| 32         | 12.6  | 63.0        | 20     | 6     | AX295921    |
| 33         | 12.6  | 63.0        | 24     | 6     | AX291288    |
| 34         | 12.6  | 63.0        | 25     | 6     | AK146793    |
| 35         | 12.6  | 63.0        | 26     | 6     | EL5940      |
| 36         | 12.6  | 63.0        | 27     | 6     | H0007424    |
| 37         | 12.6  | 63.0        | 28     | 6     | H0003100    |
| 38         | 12.6  | 63.0        | 37     | 6     | A17051      |
| 39         | 12.6  | 63.0        | 37     | 6     | A17451      |
| 40         | 12.6  | 63.0        | 37     | 6     | AK014426    |
| 41         | 12.6  | 63.0        | 37     | 6     | 111869      |
| 42         | 12.6  | 63.0        | 40     | 6     | AK146516    |
| 43         | 12.6  | 63.0        | 46     | 6     | A17061      |
| 44         | 12.6  | 63.0        | 46     | 6     | 111879      |
| 45         | 12.6  | 63.0        | 48     | 10    | MM615RNA    |
| 46         | 12.6  | 63.0        | 50     | 6     | 124042      |
| 47         | 12.4  | 62.0        | 15     | 6     | AK9355      |
| 48         | 12.4  | 62.0        | 24     | 6     | AX445159    |
| 49         | 12.4  | 62.0        | 27     | 6     | AK039564    |
| 50         | 12.4  | 62.0        | 27     | 6     | F28922      |
| 51         | 12.4  | 62.0        | 41     | 6     | AX248363    |
| 52         | 12.4  | 62.0        | 42     | 6     | AX329347    |
| 53         | 12.4  | 62.0        | 37     | 6     | AK087990    |
| 54         | 12.4  | 62.0        | 37     | 6     | AK125637    |
| 55         | 12.2  | 61.0        | 17     | 6     | H0005422    |
| 56         | 12.2  | 61.0        | 19     | 6     | AX131207    |
| 57         | 12.2  | 61.0        | 21     | 6     | AK202742    |
| 58         | 12.2  | 61.0        | 22     | 6     | A73757      |
| 59         | 12.2  | 61.0        | 22     | 6     | AK059889    |
| 60         | 12.2  | 61.0        | 23     | 6     | AK141746    |
| 61         | 12.2  | 61.0        | 23     | 6     | AK151872    |
| 62         | 12.2  | 61.0        | 25     | 6     | AX282922    |
| 63         | 12.2  | 61.0        | 27     | 6     | AX300584    |
| 64         | 12.2  | 61.0        | 43     | 6     | AK024806    |
| 65         | 12.2  | 61.0        | 42     | 6     | AK026607    |

|       |      |      |    |   |          |          |       |      |      |    |   |          |          |
|-------|------|------|----|---|----------|----------|-------|------|------|----|---|----------|----------|
| c 66  | 12.2 | 61.0 | 42 | 6 | AR029105 | Sequence | 139   | 11.6 | 58.0 | 31 | 6 | AX248910 | Sequence |
| c 67  | 12.2 | 61.0 | 42 | 6 | AR053444 | Sequence | c 140 | 11.6 | 58.0 | 31 | 6 | AX249431 | Sequence |
| c 68  | 12.2 | 61.0 | 42 | 6 | AR059876 | Sequence | c 141 | 11.6 | 58.0 | 31 | 6 | AX008960 | Sequence |
| c 69  | 12.2 | 61.0 | 42 | 6 | AR212251 | Sequence | 142   | 11.6 | 58.0 | 31 | 6 | AX179414 | Sequence |
| c 70  | 12.2 | 61.0 | 42 | 6 | AX009778 | Sequence | 143   | 11.6 | 58.0 | 31 | 6 | AX075689 | Sequence |
| c 71  | 12.2 | 61.0 | 42 | 6 | AX447118 | Sequence | 144   | 11.6 | 58.0 | 31 | 6 | AX151096 | Sequence |
| c 72  | 12.2 | 61.0 | 42 | 6 | AX289392 | Sequence | c 145 | 11.6 | 58.0 | 31 | 6 | AX151097 | Sequence |
| c 73  | 12.2 | 61.0 | 42 | 6 | AX445100 | Sequence | c 146 | 11.6 | 58.0 | 31 | 6 | AX004610 | Sequence |
| c 74  | 12.2 | 61.0 | 42 | 6 | AX010456 | Sequence | c 147 | 11.6 | 58.0 | 31 | 6 | AX0287   | Sequence |
| c 75  | 12.2 | 61.0 | 42 | 6 | AX010431 | Sequence | c 148 | 11.6 | 58.0 | 31 | 6 | AX24958  | Sequence |
| c 76  | 12.2 | 61.0 | 42 | 6 | AX095120 | Sequence | c 149 | 11.6 | 58.0 | 31 | 6 | AX178599 | Sequence |
| c 77  | 12.2 | 61.0 | 42 | 6 | AX095120 | Sequence | c 150 | 11.6 | 58.0 | 31 | 6 | AX14191  | Sequence |
| c 78  | 12.2 | 61.0 | 42 | 6 | AX095120 | Sequence | c 151 | 11.6 | 58.0 | 31 | 6 | AX14191  | Sequence |
| c 79  | 12.2 | 61.0 | 42 | 6 | AX0827   | Sequence | 152   | 11.6 | 58.0 | 31 | 6 | AX201021 | Sequence |
| c 80  | 12.2 | 61.0 | 42 | 6 | AX022791 | Sequence | 153   | 11.6 | 58.0 | 31 | 6 | AX267820 | Sequence |
| c 81  | 12.2 | 61.0 | 42 | 6 | AX286805 | Sequence | 154   | 11.6 | 58.0 | 31 | 6 | AX267820 | Sequence |
| c 82  | 12.2 | 61.0 | 42 | 6 | AX286805 | Sequence | 155   | 11.6 | 58.0 | 31 | 6 | AX076403 | Sequence |
| c 83  | 12.2 | 61.0 | 42 | 6 | AX286805 | Sequence | 156   | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 84  | 12.2 | 61.0 | 42 | 6 | AX007447 | Sequence | 157   | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 85  | 12.2 | 61.0 | 42 | 6 | AX007448 | Sequence | 158   | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 86  | 12.2 | 61.0 | 42 | 6 | AX007449 | Sequence | c 159 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 87  | 12.2 | 61.0 | 42 | 6 | AX007440 | Sequence | c 160 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 88  | 12.2 | 61.0 | 42 | 6 | AX023956 | Sequence | c 161 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 89  | 12.2 | 61.0 | 42 | 6 | AX023957 | Sequence | c 162 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 90  | 12.2 | 61.0 | 42 | 6 | AX194948 | Sequence | c 163 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 91  | 12.2 | 61.0 | 42 | 6 | AX194949 | Sequence | c 164 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 92  | 12.2 | 61.0 | 42 | 6 | AX194950 | Sequence | c 165 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 93  | 12.2 | 61.0 | 42 | 6 | AX194951 | Sequence | c 166 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 94  | 12.2 | 61.0 | 42 | 6 | AX194952 | Sequence | c 167 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 95  | 12.2 | 61.0 | 42 | 6 | AX194953 | Sequence | c 168 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 96  | 12.2 | 61.0 | 42 | 6 | AX194954 | Sequence | c 169 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 97  | 12.2 | 61.0 | 42 | 6 | AX194955 | Sequence | c 170 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 98  | 12.2 | 61.0 | 42 | 6 | AX194956 | Sequence | c 171 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 99  | 12.2 | 61.0 | 42 | 6 | AX194957 | Sequence | c 172 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 100 | 12.2 | 61.0 | 42 | 6 | AX194958 | Sequence | c 173 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 101 | 12.2 | 61.0 | 42 | 6 | AX194959 | Sequence | c 174 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 102 | 12.2 | 61.0 | 42 | 6 | AX194960 | Sequence | c 175 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 103 | 12.2 | 61.0 | 42 | 6 | AX194961 | Sequence | c 176 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 104 | 12.2 | 61.0 | 42 | 6 | AX194962 | Sequence | c 177 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 105 | 12.2 | 61.0 | 42 | 6 | AX194963 | Sequence | c 178 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 106 | 12.2 | 61.0 | 42 | 6 | AX194964 | Sequence | c 179 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 107 | 12.2 | 61.0 | 42 | 6 | AX194965 | Sequence | c 180 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 108 | 12.2 | 61.0 | 42 | 6 | AX194966 | Sequence | c 181 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 109 | 12.2 | 61.0 | 42 | 6 | AX194967 | Sequence | c 182 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 110 | 12.2 | 61.0 | 42 | 6 | AX194968 | Sequence | c 183 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 111 | 12.2 | 61.0 | 42 | 6 | AX194969 | Sequence | c 184 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 112 | 12.2 | 61.0 | 42 | 6 | AX194970 | Sequence | c 185 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 113 | 12.2 | 61.0 | 42 | 6 | AX194971 | Sequence | c 186 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 114 | 12.2 | 61.0 | 42 | 6 | AX194972 | Sequence | c 187 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 115 | 12.2 | 61.0 | 42 | 6 | AX194973 | Sequence | c 188 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 116 | 12.2 | 61.0 | 42 | 6 | AX194974 | Sequence | c 189 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 117 | 12.2 | 61.0 | 42 | 6 | AX194975 | Sequence | c 190 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 118 | 12.2 | 61.0 | 42 | 6 | AX194976 | Sequence | c 191 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 119 | 12.2 | 61.0 | 42 | 6 | AX194977 | Sequence | c 192 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 120 | 12.2 | 61.0 | 42 | 6 | AX194978 | Sequence | c 193 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 121 | 12.2 | 61.0 | 42 | 6 | AX194979 | Sequence | c 194 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 122 | 12.2 | 61.0 | 42 | 6 | AX194980 | Sequence | c 195 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 123 | 12.2 | 61.0 | 42 | 6 | AX194981 | Sequence | c 196 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 124 | 12.2 | 61.0 | 42 | 6 | AX194982 | Sequence | c 197 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 125 | 12.2 | 61.0 | 42 | 6 | AX194983 | Sequence | c 198 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 126 | 12.2 | 61.0 | 42 | 6 | AX194984 | Sequence | c 199 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 127 | 12.2 | 61.0 | 42 | 6 | AX194985 | Sequence | c 200 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 128 | 12.2 | 61.0 | 42 | 6 | AX194986 | Sequence | c 201 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 129 | 12.2 | 61.0 | 42 | 6 | AX194987 | Sequence | c 202 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 130 | 12.2 | 61.0 | 42 | 6 | AX194988 | Sequence | c 203 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 131 | 12.2 | 61.0 | 42 | 6 | AX194989 | Sequence | c 204 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 132 | 12.2 | 61.0 | 42 | 6 | AX194990 | Sequence | c 205 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 133 | 12.2 | 61.0 | 42 | 6 | AX194991 | Sequence | c 206 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 134 | 12.2 | 61.0 | 42 | 6 | AX194992 | Sequence | c 207 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 135 | 12.2 | 61.0 | 42 | 6 | AX194993 | Sequence | c 208 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 136 | 12.2 | 61.0 | 42 | 6 | AX194994 | Sequence | c 209 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 137 | 12.2 | 61.0 | 42 | 6 | AX194995 | Sequence | c 210 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |
| c 138 | 12.2 | 61.0 | 42 | 6 | AX194996 | Sequence | c 211 | 11.6 | 58.0 | 31 | 6 | AX131976 | Sequence |



|       |      |      |    |    |          |                     |       |    |      |    |    |           |                       |
|-------|------|------|----|----|----------|---------------------|-------|----|------|----|----|-----------|-----------------------|
| c 212 | 11.2 | 56.0 | 24 | 6  | AR124277 | AR124277 Sequence   | c 286 | 11 | 55.0 | 25 | 6  | E07742    | E07742 Primer, 9/1    |
| c 213 | 11.2 | 56.0 | 24 | 6  | F38254   | F38254 Hypothermia  | c 286 | 11 | 55.0 | 25 | 6  | E11708    | E11708 PCR primer     |
| c 214 | 11.2 | 56.0 | 24 | 6  | F50831   | F50831 Hypothermia  | c 287 | 11 | 55.0 | 25 | 6  | E12826    | E12826 PCR primer     |
| c 215 | 11.2 | 56.0 | 24 | 6  | 127403   | 127403 Sequence 49  | c 288 | 11 | 55.0 | 26 | 6  | AX378948  | AX378948 Sequence     |
| c 216 | 11.2 | 56.0 | 24 | 6  | 127436   | 127436 Sequence 72  | c 289 | 11 | 55.0 | 27 | 6  | AX005881  | AX005881 Sequence     |
| c 217 | 11.2 | 56.0 | 24 | 6  | AX290708 | AX290708 Sequence   | c 290 | 11 | 55.0 | 27 | 6  | AX181023  | AX181023 Sequence     |
| c 218 | 11.2 | 56.0 | 24 | 6  | AX445114 | AX445114 Sequence   | c 291 | 11 | 55.0 | 27 | 6  | AX299918  | AX299918 Sequence     |
| c 219 | 11.2 | 56.0 | 24 | 6  | F32672   | F32672 Peptide inh  | c 292 | 11 | 55.0 | 27 | 6  | AX428038  | AX428038 Sequence     |
| c 220 | 11.2 | 56.0 | 25 | 6  | AR146793 | AR146793 Sequence   | c 293 | 11 | 55.0 | 27 | 6  | S81220    | S81220 T cell and i   |
| c 221 | 11.2 | 56.0 | 25 | 6  | AR164911 | AR164911 Sequence   | c 294 | 11 | 55.0 | 28 | 6  | AR094964  | AR094964 Sequence     |
| c 222 | 11.2 | 56.0 | 26 | 6  | F51052   | F51052 Mismatch pr  | c 295 | 11 | 55.0 | 28 | 6  | AR094991  | AR094991 Sequence     |
| c 223 | 11.2 | 56.0 | 27 | 6  | AR096582 | AR096582 Sequence   | c 296 | 11 | 55.0 | 28 | 6  | AX183846  | AX183846 Sequence     |
| c 224 | 11.2 | 56.0 | 27 | 6  | AR105958 | AR105958 Sequence   | c 297 | 11 | 55.0 | 28 | 6  | AX463583  | AX463583 Sequence     |
| c 225 | 11.2 | 56.0 | 27 | 6  | AR124578 | AR124578 Sequence   | c 298 | 11 | 55.0 | 29 | 6  | AX394033  | AX394033 Sequence     |
| c 226 | 11.2 | 56.0 | 27 | 6  | AX430066 | AX430066 Sequence   | c 299 | 11 | 55.0 | 29 | 6  | AX394120  | AX394120 Sequence     |
| c 227 | 11.2 | 56.0 | 28 | 6  | AX020878 | AX020878 Sequence   | c 300 | 11 | 55.0 | 40 | 6  | AR182159  | AR182159 Sequence     |
| c 228 | 11.2 | 56.0 | 30 | 6  | AR016018 | AR016018 Sequence   | c 301 | 11 | 55.0 | 40 | 6  | AX234417  | AX234417 Sequence     |
| c 229 | 11.2 | 56.0 | 40 | 6  | AR124315 | AR124315 Sequence   | c 302 | 11 | 55.0 | 40 | 6  | S81363    | S81363 T cell and i   |
| c 230 | 11.2 | 56.0 | 40 | 6  | AR124316 | AR124316 Sequence   | c 303 | 11 | 55.0 | 41 | 6  | H0002862  | H0002862 Gene comp    |
| c 231 | 11.2 | 56.0 | 40 | 6  | AR124317 | AR124317 Sequence   | c 304 | 11 | 55.0 | 41 | 6  | E11709    | E11709 PCR primer     |
| c 232 | 11.2 | 56.0 | 40 | 6  | AR124318 | AR124318 Sequence   | c 305 | 11 | 55.0 | 43 | 6  | AR021302  | AR021302 Sequence     |
| c 233 | 11.2 | 56.0 | 40 | 6  | AR124319 | AR124319 Sequence   | c 306 | 11 | 55.0 | 43 | 6  | AR129345  | AR129345 Sequence     |
| c 234 | 11.2 | 56.0 | 40 | 6  | AR124319 | AR124319 Sequence   | c 307 | 11 | 55.0 | 43 | 6  | AR156775  | AR156775 Sequence     |
| c 235 | 11.2 | 56.0 | 40 | 6  | AR124320 | AR124320 Sequence   | c 308 | 11 | 55.0 | 43 | 6  | AR160100  | AR160100 Sequence     |
| c 236 | 11.2 | 56.0 | 40 | 6  | AR124321 | AR124321 Sequence   | c 309 | 11 | 55.0 | 43 | 6  | S81165    | S81165 T cell and i   |
| c 237 | 11.2 | 56.0 | 40 | 6  | AR124322 | AR124322 Sequence   | c 310 | 11 | 55.0 | 43 | 6  | S81201    | S81201 T cell and i   |
| c 238 | 11.2 | 56.0 | 41 | 6  | AR124314 | AR124314 Sequence   | c 311 | 11 | 55.0 | 43 | 6  | S81370    | S81370 T cell and i   |
| c 239 | 11.2 | 56.0 | 31 | 6  | AR195902 | AR195902 Sequence   | c 312 | 11 | 55.0 | 43 | 10 | AR001359  | AR001359 Mus muscu    |
| c 240 | 11.2 | 56.0 | 31 | 6  | AX043892 | AX043892 Sequence   | c 313 | 11 | 55.0 | 44 | 6  | AR021042  | AR021042 Sequence     |
| c 241 | 11.2 | 56.0 | 31 | 6  | AX060514 | AX060514 Sequence   | c 314 | 11 | 55.0 | 44 | 6  | AR043457  | AR043457 Sequence     |
| c 242 | 11.2 | 56.0 | 31 | 6  | AX247596 | AX247596 Sequence   | c 315 | 11 | 55.0 | 44 | 6  | AR062372  | AR062372 Sequence     |
| c 243 | 11.2 | 56.0 | 32 | 6  | A28021   | A28021 Human prep   | c 316 | 11 | 55.0 | 44 | 6  | AR183831  | AR183831 Sequence     |
| c 244 | 11.2 | 56.0 | 32 | 6  | A59336   | A59336 Sequence 8   | c 317 | 11 | 55.0 | 45 | 6  | A29398    | A29398 decomparte     |
| c 245 | 11.2 | 56.0 | 32 | 6  | AR009784 | AR009784 Sequence   | c 318 | 11 | 55.0 | 45 | 6  | AR134964  | AR134964 Sequence     |
| c 246 | 11.2 | 56.0 | 32 | 6  | AR014164 | AR014164 Sequence   | c 319 | 11 | 55.0 | 45 | 6  | AR166171  | AR166171 Sequence     |
| c 247 | 11.2 | 56.0 | 32 | 6  | AR124313 | AR124313 Sequence   | c 320 | 11 | 55.0 | 45 | 6  | AR166179  | AR166179 Sequence     |
| c 248 | 11.2 | 56.0 | 33 | 6  | AR124312 | AR124312 Sequence   | c 321 | 11 | 55.0 | 45 | 6  | AX001434  | AX001434 Sequence     |
| c 249 | 11.2 | 56.0 | 33 | 6  | F49665   | F49665 Insert cell  | c 322 | 11 | 55.0 | 45 | 6  | E15943    | E15943 Primer, 7/1    |
| c 250 | 11.2 | 56.0 | 34 | 6  | AR124311 | AR124311 Sequence   | c 323 | 11 | 55.0 | 45 | 6  | 136399    | 136399 Sequence 97    |
| c 251 | 11.2 | 56.0 | 34 | 6  | AX281049 | AX281049 Sequence   | c 324 | 11 | 55.0 | 45 | 6  | 188099    | 188099 Sequence 97    |
| c 252 | 11.2 | 56.0 | 34 | 6  | AX281067 | AX281067 Sequence   | c 325 | 11 | 55.0 | 46 | 6  | AR024357  | AR024357 Sequence     |
| c 253 | 11.2 | 56.0 | 35 | 6  | AR124310 | AR124310 Sequence   | c 326 | 11 | 55.0 | 46 | 6  | AR122054  | AR122054 Sequence     |
| c 254 | 11.2 | 56.0 | 46 | 6  | AR124309 | AR124309 Sequence   | c 327 | 11 | 55.0 | 46 | 6  | AR122876  | AR122876 Sequence     |
| c 255 | 11.2 | 56.0 | 47 | 6  | AR124308 | AR124308 Sequence   | c 328 | 11 | 55.0 | 46 | 6  | AR125113  | AR125113 Sequence     |
| c 256 | 11.2 | 56.0 | 49 | 6  | A93085   | A93085 Sequence 10  | c 329 | 11 | 55.0 | 46 | 6  | HSA010876 | HSA010876 Homo sapi   |
| c 257 | 11.2 | 56.0 | 40 | 6  | AX269008 | AX269008 Sequence   | c 330 | 11 | 55.0 | 46 | 6  | S81208    | S81208 T cell and i   |
| c 258 | 11.2 | 56.0 | 41 | 6  | AR050470 | AR050470 Sequence   | c 331 | 11 | 55.0 | 46 | 6  | HS295089  | HS295089 H. sapiens m |
| c 259 | 11.2 | 56.0 | 41 | 6  | AR124598 | AR124598 Sequence   | c 332 | 11 | 55.0 | 46 | 10 | MMU299485 | MMU299485 Mus muscu   |
| c 260 | 11.2 | 56.0 | 42 | 6  | A05207   | A05207 g1 lacmuleo  | c 333 | 11 | 55.0 | 46 | 10 | MMTCRHEG2 | MMTCRHEG2 Sequence    |
| c 261 | 11.2 | 56.0 | 42 | 6  | A11704   | A11704 g1 lacmuleo  | c 334 | 11 | 55.0 | 48 | 6  | AR008957  | AR008957 Sequence     |
| c 262 | 11.2 | 56.0 | 43 | 6  | AR141013 | AR141013 Sequence   | c 335 | 11 | 55.0 | 48 | 6  | 124411    | 124411 Sequence 6     |
| c 263 | 11.2 | 56.0 | 43 | 6  | AR141026 | AR141026 Sequence   | c 336 | 11 | 55.0 | 49 | 6  | A18283    | A18283 g1 lacmuleo    |
| c 264 | 11.2 | 56.0 | 43 | 14 | 188714   | 188714 Repeatitis G | c 337 | 11 | 55.0 | 49 | 6  | A59580    | A59580 Sequence 8     |
| c 265 | 11.2 | 56.0 | 43 | 14 | 188754   | 188754 Repeatitis G | c 338 | 11 | 55.0 | 49 | 6  | AR060554  | AR060554 Sequence     |
| c 266 | 11.2 | 56.0 | 46 | 6  | A98787   | A98787 Sequence 20  | c 339 | 11 | 55.0 | 49 | 6  | AR140408  | AR140408 Sequence     |
| c 267 | 11.2 | 56.0 | 47 | 6  | A98778   | A98778 Sequence 11  | c 340 | 11 | 55.0 | 49 | 6  | AR146889  | AR146889 Sequence     |
| c 268 | 11.2 | 56.0 | 48 | 6  | AX055772 | AX055772 Sequence   | c 341 | 11 | 55.0 | 49 | 6  | AR156781  | AR156781 Sequence     |
| c 269 | 11.2 | 56.0 | 48 | 6  | AX148585 | AX148585 Sequence   | c 342 | 11 | 55.0 | 49 | 6  | 156857    | 156857 Sequence 4     |
| c 270 | 11   | 55.0 | 18 | 6  | 157062   | 157062 Sequence 64  | c 343 | 11 | 55.0 | 39 | 6  | HSA010873 | HSA010873 Homo sapi   |
| c 271 | 11   | 55.0 | 19 | 6  | AX141209 | AX141209 Sequence   | c 344 | 11 | 55.0 | 39 | 6  | HSA010874 | HSA010874 Homo sapi   |
| c 272 | 11   | 55.0 | 19 | 6  | AX207263 | AX207263 Sequence   | c 345 | 11 | 55.0 | 39 | 6  | HSA010876 | HSA010876 Homo sapi   |
| c 273 | 11   | 55.0 | 20 | 6  | AR160760 | AR160760 Sequence   | c 346 | 11 | 55.0 | 39 | 6  | HSA010904 | HSA010904 Homo sapi   |
| c 274 | 11   | 55.0 | 20 | 6  | AR195306 | AR195306 Sequence   | c 347 | 11 | 55.0 | 39 | 6  | HSA019922 | HSA019922 Homo sapi   |
| c 275 | 11   | 55.0 | 20 | 6  | AX462791 | AX462791 Sequence   | c 348 | 11 | 55.0 | 39 | 6  | HS010873  | HS010873 H. sapiens 1 |
| c 276 | 11   | 55.0 | 21 | 6  | AX103374 | AX103374 Sequence   | c 349 | 11 | 55.0 | 39 | 6  | HS010874  | HS010874 H. sapiens 1 |
| c 277 | 11   | 55.0 | 24 | 6  | AR089942 | AR089942 Sequence   | c 350 | 11 | 55.0 | 39 | 6  | HS010875  | HS010875 H. sapiens 1 |
| c 278 | 11   | 55.0 | 24 | 6  | AR196977 | AR196977 Sequence   | c 351 | 11 | 55.0 | 39 | 6  | HS010876  | HS010876 H. sapiens m |
| c 279 | 11   | 55.0 | 24 | 6  | AX003352 | AX003352 Sequence   | c 352 | 11 | 55.0 | 39 | 10 | S81386    | S81386 T cell and i   |
| c 280 | 11   | 55.0 | 24 | 6  | AX447498 | AX447498 Sequence   | c 353 | 11 | 55.0 | 40 | 6  | A99065    | A99065 Sequence 34    |
| c 281 | 11   | 55.0 | 24 | 6  | AX454959 | AX454959 Sequence   | c 354 | 11 | 55.0 | 40 | 6  | A99066    | A99066 Sequence 74    |
| c 282 | 11   | 55.0 | 25 | 6  | AX326732 | AX326732 Sequence   | c 355 | 11 | 55.0 | 40 | 6  | AR195380  | AR195380 Sequence     |
| c 283 | 11   | 55.0 | 25 | 6  | AX326734 | AX326734 Sequence   | c 356 | 11 | 55.0 | 40 | 6  | AR195381  | AR195381 Sequence     |
| c 284 | 11   | 55.0 | 25 | 6  | AX326736 | AX326736 Sequence   | c 357 | 11 | 55.0 | 40 | 6  | AX001471  | AX001471 Sequence     |





|       |      |      |    |   |          |              |          |              |       |      |      |    |    |           |                       |
|-------|------|------|----|---|----------|--------------|----------|--------------|-------|------|------|----|----|-----------|-----------------------|
| c 650 | 10.4 | 52.0 | 22 | 6 | AX019891 | Sequence     | AX019891 | Sequence     | c 724 | 10.4 | 52.0 | 43 | 6  | AR152025  | AR152025 Sequence     |
| c 651 | 10.4 | 52.0 | 22 | 6 | AX241146 | Sequence     | AX241146 | Sequence     | c 725 | 10.4 | 52.0 | 43 | 6  | AX417298  | AX417298 Sequence     |
| c 652 | 10.4 | 52.0 | 22 | 6 | AX486803 | Sequence     | AX486803 | Sequence     | c 726 | 10.4 | 52.0 | 44 | 6  | A09169    | A09169 clonal         |
| c 653 | 10.4 | 52.0 | 24 | 6 | A37923   | Sequence 1   | A37923   | Sequence 1   | c 727 | 10.4 | 52.0 | 44 | 6  | A09506    | A09506 clonal         |
| c 654 | 10.4 | 52.0 | 24 | 6 | A49491   | Sequence 9   | A49491   | Sequence 9   | c 728 | 10.4 | 52.0 | 44 | 6  | AX168006  | AX168006 Sequence     |
| c 655 | 10.4 | 52.0 | 24 | 6 | AR176297 | Sequence     | AR176297 | Sequence     | c 729 | 10.4 | 52.0 | 44 | 9  | HUMC1A1   | HUMC1A1 Homo sapien   |
| c 656 | 10.4 | 52.0 | 24 | 6 | AX146765 | Sequence     | AX146765 | Sequence     | c 730 | 10.4 | 52.0 | 44 | 10 | MUSACOLA1 | MUSACOLA1 Mouse alpha |
| c 657 | 10.4 | 52.0 | 24 | 6 | AX207883 | Sequence     | AX207883 | Sequence     | c 731 | 10.4 | 52.0 | 45 | 6  | A29416    | A29416 desferriate    |
| c 658 | 10.4 | 52.0 | 24 | 6 | AX444614 | Sequence     | AX444614 | Sequence     | c 732 | 10.4 | 52.0 | 45 | 6  | AR022477  | AR022477 Sequence     |
| c 659 | 10.4 | 52.0 | 24 | 6 | AX447081 | Sequence     | AX447081 | Sequence     | c 733 | 10.4 | 52.0 | 45 | 6  | AR064456  | AR064456 Sequence     |
| c 660 | 10.4 | 52.0 | 25 | 6 | AR001365 | Sequence     | AR001365 | Sequence     | c 734 | 10.4 | 52.0 | 45 | 6  | AR064955  | AR064955 Sequence     |
| c 661 | 10.4 | 52.0 | 25 | 6 | AR044850 | Sequence     | AR044850 | Sequence     | c 735 | 10.4 | 52.0 | 45 | 6  | AR144982  | AR144982 Sequence     |
| c 662 | 10.4 | 52.0 | 25 | 6 | AR052236 | Sequence     | AR052236 | Sequence     | c 736 | 10.4 | 52.0 | 45 | 6  | AR141811  | AR141811 Sequence     |
| c 663 | 10.4 | 52.0 | 25 | 6 | AR078345 | Sequence     | AR078345 | Sequence     | c 737 | 10.4 | 52.0 | 45 | 6  | AR143428  | AR143428 Sequence     |
| c 664 | 10.4 | 52.0 | 25 | 6 | AR085196 | Sequence     | AR085196 | Sequence     | c 738 | 10.4 | 52.0 | 45 | 6  | AR151947  | AR151947 Sequence     |
| c 665 | 10.4 | 52.0 | 25 | 6 | AR148116 | Sequence     | AR148116 | Sequence     | c 739 | 10.4 | 52.0 | 45 | 6  | 166417    | 166417 Sequence 11    |
| c 666 | 10.4 | 52.0 | 25 | 6 | AX081681 | Sequence     | AX081681 | Sequence     | c 740 | 10.4 | 52.0 | 45 | 6  | 188117    | 188117 Sequence 11    |
| c 667 | 10.4 | 52.0 | 25 | 6 | 139900   | Sequence 8   | 139900   | Sequence 8   | c 741 | 10.4 | 52.0 | 46 | 6  | A09170    | A09170 clonal         |
| c 668 | 10.4 | 52.0 | 26 | 6 | AR045215 | Sequence     | AR045215 | Sequence     | c 742 | 10.4 | 52.0 | 46 | 6  | A09507    | A09507 clonal         |
| c 669 | 10.4 | 52.0 | 26 | 6 | AR068167 | Sequence     | AR068167 | Sequence     | c 743 | 10.4 | 52.0 | 46 | 6  | A64422    | A64422 Sequence 45    |
| c 670 | 10.4 | 52.0 | 26 | 6 | AR068168 | Sequence     | AR068168 | Sequence     | c 744 | 10.4 | 52.0 | 46 | 6  | AR9672    | AR9672 Sequence 4     |
| c 671 | 10.4 | 52.0 | 26 | 6 | AR091552 | Sequence     | AR091552 | Sequence     | c 745 | 10.4 | 52.0 | 46 | 6  | AR9809    | AR9809 Sequence 4     |
| c 672 | 10.4 | 52.0 | 26 | 6 | AX286814 | Sequence     | AX286814 | Sequence     | c 746 | 10.4 | 52.0 | 46 | 6  | AR097894  | AR097894 Sequence     |
| c 673 | 10.4 | 52.0 | 26 | 6 | AX449121 | Sequence     | AX449121 | Sequence     | c 747 | 10.4 | 52.0 | 46 | 6  | AR121198  | AR121198 Sequence     |
| c 674 | 10.4 | 52.0 | 26 | 6 | 10010800 | Novel pool   | 10010800 | Novel pool   | c 748 | 10.4 | 52.0 | 46 | 6  | AR125140  | AR125140 Sequence     |
| c 675 | 10.4 | 52.0 | 26 | 6 | 132130   | Sequence 5   | 132130   | Sequence 5   | c 749 | 10.4 | 52.0 | 46 | 6  | AR131904  | AR131904 Sequence     |
| c 676 | 10.4 | 52.0 | 26 | 6 | 132131   | Sequence 5   | 132131   | Sequence 5   | c 750 | 10.4 | 52.0 | 46 | 6  | AR151687  | AR151687 Sequence     |
| c 677 | 10.4 | 52.0 | 26 | 6 | 152267   | Sequence 8   | 152267   | Sequence 8   | c 751 | 10.4 | 52.0 | 46 | 6  | AR160426  | AR160426 Sequence     |
| c 678 | 10.4 | 52.0 | 27 | 6 | A24443   | clonal       | A24443   | clonal       | c 752 | 10.4 | 52.0 | 46 | 6  | AX006715  | AX006715 Sequence     |
| c 679 | 10.4 | 52.0 | 27 | 6 | AR182402 | Sequence     | AR182402 | Sequence     | c 753 | 10.4 | 52.0 | 46 | 6  | AX006729  | AX006729 Sequence     |
| c 680 | 10.4 | 52.0 | 27 | 6 | AR182406 | Sequence     | AR182406 | Sequence     | c 754 | 10.4 | 52.0 | 46 | 6  | AX022992  | AX022992 Sequence     |
| c 681 | 10.4 | 52.0 | 27 | 6 | AR184795 | Sequence     | AR184795 | Sequence     | c 755 | 10.4 | 52.0 | 46 | 6  | 10004613  | 10004613 Met heads 3  |
| c 682 | 10.4 | 52.0 | 27 | 6 | AR191134 | Sequence     | AR191134 | Sequence     | c 756 | 10.4 | 52.0 | 46 | 6  | 146947    | 146947 Sequence 40    |
| c 683 | 10.4 | 52.0 | 27 | 6 | AX063342 | Sequence     | AX063342 | Sequence     | c 757 | 10.4 | 52.0 | 47 | 6  | AR002414  | AR002414 Sequence     |
| c 684 | 10.4 | 52.0 | 27 | 6 | AX317286 | Sequence     | AX317286 | Sequence     | c 758 | 10.4 | 52.0 | 47 | 6  | AR002419  | AR002419 Sequence     |
| c 685 | 10.4 | 52.0 | 27 | 6 | 112078   | Sequence 2   | 112078   | Sequence 2   | c 759 | 10.4 | 52.0 | 47 | 6  | AR034604  | AR034604 Sequence     |
| c 686 | 10.4 | 52.0 | 28 | 6 | AR037315 | Sequence     | AR037315 | Sequence     | c 760 | 10.4 | 52.0 | 47 | 6  | AX280656  | AX280656 Sequence     |
| c 687 | 10.4 | 52.0 | 28 | 6 | AR161660 | Sequence     | AR161660 | Sequence     | c 761 | 10.4 | 52.0 | 47 | 6  | AX280657  | AX280657 Sequence 45  |
| c 688 | 10.4 | 52.0 | 28 | 6 | AX461475 | Sequence     | AX461475 | Sequence     | c 762 | 10.4 | 52.0 | 47 | 6  | 166287    | 166287 Sequence 50    |
| c 689 | 10.4 | 52.0 | 29 | 6 | AX008184 | Sequence     | AX008184 | Sequence     | c 763 | 10.4 | 52.0 | 47 | 6  | 179894    | 179894 Sequence 45    |
| c 690 | 10.4 | 52.0 | 29 | 6 | F59760   | Enzyme shell | F59760   | Enzyme shell | c 764 | 10.4 | 52.0 | 47 | 6  | 179899    | 179899 Sequence 60    |
| c 691 | 10.4 | 52.0 | 30 | 6 | AR017943 | Sequence     | AR017943 | Sequence     | c 765 | 10.4 | 52.0 | 48 | 6  | A64423    | A64423 Sequence 46    |
| c 692 | 10.4 | 52.0 | 30 | 6 | AR028208 | Sequence     | AR028208 | Sequence     | c 766 | 10.4 | 52.0 | 48 | 6  | AX022992  | AX022992 Sequence     |
| c 693 | 10.4 | 52.0 | 30 | 6 | AR148611 | Sequence     | AR148611 | Sequence     | c 767 | 10.4 | 52.0 | 48 | 6  | AX067208  | AX067208 Sequence     |
| c 694 | 10.4 | 52.0 | 30 | 6 | AR172436 | Sequence     | AR172436 | Sequence     | c 768 | 10.4 | 52.0 | 48 | 6  | AX222817  | AX222817 Sequence     |
| c 695 | 10.4 | 52.0 | 30 | 6 | AX001042 | Sequence     | AX001042 | Sequence     | c 769 | 10.4 | 52.0 | 48 | 6  | AX228109  | AX228109 Sequence     |
| c 696 | 10.4 | 52.0 | 30 | 6 | AX057066 | Sequence     | AX057066 | Sequence     | c 770 | 10.4 | 52.0 | 48 | 6  | 10010824  | 10010824 Novel pool   |
| c 697 | 10.4 | 52.0 | 30 | 6 | AX089410 | Sequence     | AX089410 | Sequence     | c 771 | 10.4 | 52.0 | 48 | 6  | 10010824  | 10010824 Novel pool   |
| c 698 | 10.4 | 52.0 | 30 | 6 | AX089412 | Sequence     | AX089412 | Sequence     | c 772 | 10.4 | 52.0 | 49 | 6  | HS030422  | HS030422 Human 150kA  |
| c 699 | 10.4 | 52.0 | 30 | 6 | AX428462 | Sequence     | AX428462 | Sequence     | c 773 | 10.4 | 52.0 | 49 | 6  | A37820    | A37820 Sequence 36    |
| c 700 | 10.4 | 52.0 | 30 | 6 | AX428494 | Sequence     | AX428494 | Sequence     | c 774 | 10.4 | 52.0 | 49 | 6  | AR5336    | AR5336 Sequence 36    |
| c 701 | 10.4 | 52.0 | 30 | 6 | AX472650 | Sequence     | AX472650 | Sequence     | c 775 | 10.4 | 52.0 | 49 | 6  | AX456194  | AX456194 Sequence     |
| c 702 | 10.4 | 52.0 | 30 | 6 | AX472652 | Sequence     | AX472652 | Sequence     | c 776 | 10.4 | 52.0 | 49 | 6  | AX456274  | AX456274 Sequence     |
| c 703 | 10.4 | 52.0 | 30 | 6 | F36193   | Upstream 10  | F36193   | Upstream 10  | c 777 | 10.4 | 52.0 | 40 | 6  | 10010819  | 10010819 Novel pool   |
| c 704 | 10.4 | 52.0 | 30 | 6 | 134293   | Sequence 7   | 134293   | Sequence 7   | c 778 | 10.4 | 52.0 | 41 | 6  | AR083486  | AR083486 Sequence     |
| c 705 | 10.4 | 52.0 | 31 | 6 | AR099040 | Sequence     | AR099040 | Sequence     | c 779 | 10.4 | 52.0 | 41 | 6  | AR141024  | AR141024 Sequence     |
| c 706 | 10.4 | 52.0 | 31 | 6 | AR107051 | Sequence     | AR107051 | Sequence     | c 780 | 10.4 | 52.0 | 41 | 6  | 10010822  | 10010822 Novel pool   |
| c 707 | 10.4 | 52.0 | 31 | 6 | AR116871 | Sequence     | AR116871 | Sequence     | c 781 | 10.4 | 52.0 | 41 | 6  | 10010825  | 10010825 Novel pool   |
| c 708 | 10.4 | 52.0 | 31 | 6 | AR127102 | Sequence     | AR127102 | Sequence     | c 782 | 10.4 | 52.0 | 42 | 6  | A45000    | A45000 Sequence 19    |
| c 709 | 10.4 | 52.0 | 31 | 6 | AR151578 | Sequence     | AR151578 | Sequence     | c 783 | 10.4 | 52.0 | 42 | 6  | AR083487  | AR083487 Sequence     |
| c 710 | 10.4 | 52.0 | 31 | 6 | AX247956 | Sequence     | AX247956 | Sequence     | c 784 | 10.4 | 52.0 | 42 | 6  | AR106162  | AR106162 Sequence     |
| c 711 | 10.4 | 52.0 | 31 | 6 | AX247995 | Sequence     | AX247995 | Sequence     | c 785 | 10.4 | 52.0 | 42 | 6  | AR116308  | AR116308 Sequence     |
| c 712 | 10.4 | 52.0 | 31 | 6 | AX249445 | Sequence     | AX249445 | Sequence     | c 786 | 10.4 | 52.0 | 42 | 6  | E16391    | E16391 Linker 1 1/1   |
| c 713 | 10.4 | 52.0 | 31 | 6 | AX286736 | Sequence     | AX286736 | Sequence     | c 787 | 10.4 | 52.0 | 42 | 6  | E16392    | E16392 Linker 1 1/1   |
| c 714 | 10.4 | 52.0 | 31 | 6 | AX286736 | Sequence     | AX286736 | Sequence     | c 788 | 10.4 | 52.0 | 42 | 6  | E16392    | E16392 Linker 1 1/1   |
| c 715 | 10.4 | 52.0 | 31 | 6 | AX354576 | Sequence     | AX354576 | Sequence     | c 789 | 10.4 | 52.0 | 42 | 6  | 112083    | 112083 Sequence 18    |
| c 716 | 10.4 | 52.0 | 31 | 6 | AX468521 | Sequence     | AX468521 | Sequence     | c 790 | 10.4 | 52.0 | 42 | 6  | 112090    | 112090 Sequence 40    |
| c 717 | 10.4 | 52.0 | 31 | 6 | 112991   | Sequence 74  | 112991   | Sequence 74  | c 791 | 10.4 | 52.0 | 42 | 6  | 112091    | 112091 Sequence 42    |
| c 718 | 10.4 | 52.0 | 31 | 6 | 115491   | Sequence 4   | 115491   | Sequence 4   | c 792 | 10.4 | 52.0 | 42 | 6  | E24317    | E24317 Sequence 12    |
| c 719 | 10.4 | 52.0 | 31 | 6 | 121417   | Sequence 5   | 121417   | Sequence 5   | c 793 | 10.4 | 52.0 | 42 | 6  | HS010899  | HS010899 Homo sapi    |
| c 720 | 10.4 | 52.0 | 32 | 6 | AR083484 | Sequence     | AR083484 | Sequence     | c 794 | 10.4 | 52.0 | 43 | 6  | AX026806  | AX026806 Sequence 16  |
| c 721 | 10.4 | 52.0 | 32 | 6 | AX008154 | Sequence     | AX008154 | Sequence     | c 795 | 10.4 | 52.0 | 43 | 6  | A64183    | A64183 Sequence 16    |
| c 722 | 10.4 | 52.0 | 32 | 6 | AX184124 | Sequence     | AX184124 | Sequence     | c 796 | 10.4 | 52.0 | 43 | 6  | AR095570  | AR095570 Sequence     |
| c 723 | 10.4 | 52.0 | 32 | 6 | E28832   | Human, CN 1y | E28832   | Human, CN 1y |       |      |      |    |    |           |                       |

|       |      |      |    |   |            |                     |       |      |      |    |    |          |                      |
|-------|------|------|----|---|------------|---------------------|-------|------|------|----|----|----------|----------------------|
| c 796 | 10.4 | 52.0 | 45 | 6 | AR149753   | AR149753 Sequence   | 869   | 10.2 | 51.0 | 21 | 6  | AX147925 | AX147925 Sequence    |
| c 797 | 10.4 | 52.0 | 45 | 6 | E52000     | E52000 Primer, 1    | 870   | 10.2 | 51.0 | 21 | 6  | AX245400 | AX245400 Sequence    |
| c 798 | 10.4 | 52.0 | 46 | 6 | E08432     | E08432 Multi-cloni  | 871   | 10.2 | 51.0 | 21 | 6  | AX400926 | AX400926 Sequence    |
| c 799 | 10.4 | 52.0 | 47 | 9 | H0M8PS     | H28448 Human mRNA   | c 872 | 10.2 | 51.0 | 21 | 6  | E51272   | E51272 Dissected     |
| c 800 | 10.4 | 52.0 | 47 | 9 | H0M8PS     | H28448 Human mRNA   | c 873 | 10.2 | 51.0 | 21 | 6  | 136955   | 136955 Sequence 41   |
| c 801 | 10.4 | 52.0 | 48 | 9 | HSAR012537 | AR1012537 Homo sapi | c 874 | 10.2 | 51.0 | 22 | 4  | H0VINE24 | H0VINE24 Sequence 13 |
| c 802 | 10.4 | 52.0 | 48 | 9 | HSTRK6X7   | 269524 H.sapiens m  | c 875 | 10.2 | 51.0 | 22 | 6  | A58384   | A58384 Sequence 13   |
| c 803 | 10.4 | 52.0 | 48 | 9 | HSTRK6X11  | 269526 H.sapiens m  | c 876 | 10.2 | 51.0 | 22 | 6  | AR124291 | AR124291 Sequence    |
| c 804 | 10.4 | 52.0 | 48 | 9 | HSTRK6X16  | 269530 H.sapiens m  | c 877 | 10.2 | 51.0 | 22 | 6  | AR211944 | AR211944 Sequence    |
| c 805 | 10.4 | 52.0 | 48 | 9 | HSTRK6X17  | 269531 H.sapiens m  | c 878 | 10.2 | 51.0 | 22 | 6  | AX449630 | AX449630 Sequence    |
| c 806 | 10.4 | 52.0 | 48 | 9 | HSTRK6X7   | 269552 H.sapiens m  | c 879 | 10.2 | 51.0 | 22 | 6  | H0004305 | H0004305 DNA encod   |
| c 807 | 10.4 | 52.0 | 48 | 9 | HSTRK6X11  | 269554 H.sapiens m  | c 880 | 10.2 | 51.0 | 22 | 6  | H0004318 | H0004318 DNA encod   |
| c 808 | 10.4 | 52.0 | 48 | 9 | HSTRK6X16  | 269558 H.sapiens m  | c 881 | 10.2 | 51.0 | 22 | 6  | E04777   | E04777 Synthetic 10  |
| c 809 | 10.4 | 52.0 | 48 | 9 | HSTRK6X17  | 269559 H.sapiens m  | c 882 | 10.2 | 51.0 | 23 | 6  | AR1700   | AR1700 Sequence 5    |
| c 810 | 10.4 | 52.0 | 48 | 9 | AX174843   | AR174843 Sequence   | c 883 | 10.2 | 51.0 | 23 | 6  | AR098936 | AR098936 Sequence    |
| c 811 | 10.4 | 52.0 | 49 | 6 | E62958     | E62958 Novel polyp  | c 884 | 10.2 | 51.0 | 23 | 6  | AR124232 | AR124232 Sequence    |
| c 812 | 10.4 | 52.0 | 49 | 6 | E62959     | E62959 Novel polyp  | c 885 | 10.2 | 51.0 | 23 | 6  | AR124263 | AR124263 Sequence    |
| c 813 | 10.4 | 52.0 | 50 | 6 | AR172670   | AR172670 Sequence   | c 886 | 10.2 | 51.0 | 23 | 6  | AR207792 | AR207792 Sequence    |
| c 814 | 10.2 | 51.0 | 16 | 6 | AX166761   | AX166761 Sequence   | c 887 | 10.2 | 51.0 | 23 | 6  | AX250620 | AX250620 Sequence    |
| c 815 | 10.2 | 51.0 | 17 | 6 | AR040315   | AR040315 Sequence   | c 888 | 10.2 | 51.0 | 23 | 6  | AX280077 | AX280077 Sequence    |
| c 816 | 10.2 | 51.0 | 17 | 6 | AR192196   | AR192196 Sequence   | c 889 | 10.2 | 51.0 | 23 | 6  | 127402   | 127402 Sequence 34   |
| c 817 | 10.2 | 51.0 | 17 | 6 | AR192198   | AR192198 Sequence   | c 890 | 10.2 | 51.0 | 23 | 6  | 127435   | 127435 Sequence 71   |
| c 818 | 10.2 | 51.0 | 17 | 6 | AR195725   | AR195725 Sequence   | c 891 | 10.2 | 51.0 | 23 | 6  | 179776   | 179776 Sequence 72   |
| c 819 | 10.2 | 51.0 | 17 | 6 | AR196314   | AR196314 Sequence   | c 892 | 10.2 | 51.0 | 24 | 6  | AR102917 | AR102917 Sequence    |
| c 820 | 10.2 | 51.0 | 17 | 6 | AR196315   | AR196315 Sequence   | c 893 | 10.2 | 51.0 | 24 | 6  | AR108096 | AR108096 Sequence    |
| c 821 | 10.2 | 51.0 | 17 | 6 | AX218129   | AX218129 Sequence   | c 894 | 10.2 | 51.0 | 24 | 6  | AR134744 | AR134744 Sequence    |
| c 822 | 10.2 | 51.0 | 17 | 6 | AX218277   | AX218277 Sequence   | c 895 | 10.2 | 51.0 | 24 | 6  | AR175448 | AR175448 Sequence    |
| c 823 | 10.2 | 51.0 | 18 | 6 | A52558     | A52558 Sequence 7   | c 896 | 10.2 | 51.0 | 24 | 6  | AX057459 | AX057459 Sequence    |
| c 824 | 10.2 | 51.0 | 18 | 6 | A6542      | A6542 Sequence 7    | c 897 | 10.2 | 51.0 | 24 | 6  | AX289421 | AX289421 Sequence    |
| c 825 | 10.2 | 51.0 | 18 | 6 | AK055761   | AK055761 Sequence   | c 898 | 10.2 | 51.0 | 24 | 6  | AX291440 | AX291440 Sequence    |
| c 826 | 10.2 | 51.0 | 18 | 6 | AR184406   | AR184406 Sequence   | c 899 | 10.2 | 51.0 | 24 | 6  | AX345069 | AX345069 Sequence    |
| c 827 | 10.2 | 51.0 | 18 | 6 | AX084916   | AX084916 Sequence   | c 900 | 10.2 | 51.0 | 24 | 6  | AX443242 | AX443242 Sequence    |
| c 828 | 10.2 | 51.0 | 18 | 6 | AX134715   | AX134715 Sequence   | c 901 | 10.2 | 51.0 | 24 | 6  | AX443246 | AX443246 Sequence    |
| c 829 | 10.2 | 51.0 | 18 | 6 | AX135940   | AX135940 Sequence   | c 902 | 10.2 | 51.0 | 24 | 6  | AX445165 | AX445165 Sequence    |
| c 830 | 10.2 | 51.0 | 18 | 6 | AX135941   | AX135941 Sequence   | c 903 | 10.2 | 51.0 | 25 | 6  | A40198   | A40198 Sequence 14   |
| c 831 | 10.2 | 51.0 | 18 | 6 | AX177329   | AX177329 Sequence   | c 904 | 10.2 | 51.0 | 25 | 6  | AR019045 | AR019045 Sequence    |
| c 832 | 10.2 | 51.0 | 18 | 6 | 158640     | 158640 Sequence 8   | c 905 | 10.2 | 51.0 | 25 | 6  | AR035117 | AR035117 Sequence    |
| c 833 | 10.2 | 51.0 | 19 | 6 | AR102029   | AR102029 Sequence   | c 906 | 10.2 | 51.0 | 25 | 6  | AR124233 | AR124233 Sequence    |
| c 834 | 10.2 | 51.0 | 19 | 6 | AR119302   | AR119302 Sequence   | c 907 | 10.2 | 51.0 | 25 | 6  | AR124264 | AR124264 Sequence    |
| c 835 | 10.2 | 51.0 | 19 | 6 | AR134812   | AR134812 Sequence   | c 908 | 10.2 | 51.0 | 25 | 6  | AR135063 | AR135063 Sequence    |
| c 836 | 10.2 | 51.0 | 19 | 6 | AR164756   | AR164756 Sequence   | c 909 | 10.2 | 51.0 | 25 | 6  | AR146059 | AR146059 Sequence    |
| c 837 | 10.2 | 51.0 | 19 | 6 | AX129258   | AX129258 Sequence   | c 910 | 10.2 | 51.0 | 25 | 6  | AX035618 | AX035618 Sequence    |
| c 838 | 10.2 | 51.0 | 19 | 6 | AX129259   | AX129259 Sequence   | c 911 | 10.2 | 51.0 | 25 | 6  | AX093029 | AX093029 Sequence    |
| c 839 | 10.2 | 51.0 | 19 | 6 | AX129896   | AX129896 Sequence   | c 912 | 10.2 | 51.0 | 25 | 6  | AX278962 | AX278962 Sequence    |
| c 840 | 10.2 | 51.0 | 20 | 6 | A42092     | A42092 Sequence 4   | c 913 | 10.2 | 51.0 | 25 | 6  | AX283624 | AX283624 Sequence    |
| c 841 | 10.2 | 51.0 | 20 | 6 | A42093     | A42093 Sequence 5   | c 914 | 10.2 | 51.0 | 25 | 6  | E13458   | E13458 PCR primer    |
| c 842 | 10.2 | 51.0 | 20 | 6 | A51386     | A51386 Sequence 2   | c 915 | 10.2 | 51.0 | 25 | 6  | 126640   | 126640 Sequence 4    |
| c 843 | 10.2 | 51.0 | 20 | 6 | A51487     | A51487 Sequence 4   | c 916 | 10.2 | 51.0 | 25 | 6  | 127405   | 127405 Sequence 41   |
| c 844 | 10.2 | 51.0 | 20 | 6 | A79832     | A79832 Sequence 4   | c 917 | 10.2 | 51.0 | 25 | 6  | 127438   | 127438 Sequence 74   |
| c 845 | 10.2 | 51.0 | 20 | 6 | AR072265   | AR072265 Sequence   | c 918 | 10.2 | 51.0 | 25 | 14 | S59957   | S59957 {recombined   |
| c 846 | 10.2 | 51.0 | 20 | 6 | AR076729   | AR076729 Sequence   | c 919 | 10.2 | 51.0 | 26 | 6  | AX038111 | AX038111 Sequence    |
| c 847 | 10.2 | 51.0 | 20 | 6 | AR177657   | AR177657 Sequence   | c 920 | 10.2 | 51.0 | 26 | 6  | AX134140 | AX134140 Sequence    |
| c 848 | 10.2 | 51.0 | 20 | 6 | AR177658   | AR177658 Sequence   | c 921 | 10.2 | 51.0 | 27 | 6  | A57176   | A57176 Sequence 17   |
| c 849 | 10.2 | 51.0 | 20 | 6 | AR182786   | AR182786 Sequence   | c 922 | 10.2 | 51.0 | 27 | 6  | AR094093 | AR094093 Sequence    |
| c 850 | 10.2 | 51.0 | 20 | 6 | AR208759   | AR208759 Sequence   | c 923 | 10.2 | 51.0 | 27 | 6  | AX278296 | AX278296 Sequence    |
| c 851 | 10.2 | 51.0 | 20 | 6 | AX020057   | AX020057 Sequence   | c 924 | 10.2 | 51.0 | 27 | 6  | AX329442 | AX329442 Sequence    |
| c 852 | 10.2 | 51.0 | 20 | 6 | AX079143   | AX079143 Sequence   | c 925 | 10.2 | 51.0 | 27 | 6  | AX428391 | AX428391 Sequence    |
| c 853 | 10.2 | 51.0 | 20 | 6 | AX133293   | AX133293 Sequence   | c 926 | 10.2 | 51.0 | 27 | 6  | H0005759 | H0005759 Herpant     |
| c 854 | 10.2 | 51.0 | 20 | 6 | AX488210   | AX488210 Sequence   | c 927 | 10.2 | 51.0 | 28 | 6  | A97440   | A97440 Sequence 22   |
| c 855 | 10.2 | 51.0 | 20 | 6 | E11282     | E11282 PCR primer   | c 928 | 10.2 | 51.0 | 28 | 6  | AR164953 | AR164953 Sequence    |
| c 856 | 10.2 | 51.0 | 20 | 6 | E43264     | E43264 Primer for   | c 929 | 10.2 | 51.0 | 28 | 6  | AR171736 | AR171736 Sequence    |
| c 857 | 10.2 | 51.0 | 20 | 6 | E43283     | E43283 Primer for   | c 930 | 10.2 | 51.0 | 28 | 6  | AX259188 | AX259188 Sequence    |
| c 858 | 10.2 | 51.0 | 20 | 6 | 126376     | 126376 Sequence 68  | c 931 | 10.2 | 51.0 | 28 | 6  | H0013270 | H0013270 Mannose 1   |
| c 859 | 10.2 | 51.0 | 21 | 6 | AR036777   | AR036777 Sequence   | c 932 | 10.2 | 51.0 | 28 | 6  | F04843   | F04843 Synthetic 10  |
| c 860 | 10.2 | 51.0 | 21 | 6 | AR124304   | AR124304 Sequence   | c 933 | 10.2 | 51.0 | 28 | 24 | H0010243 | H0010243 Mannose 1   |
| c 861 | 10.2 | 51.0 | 21 | 6 | AR142449   | AR142449 Sequence   | c 934 | 10.2 | 51.0 | 29 | 6  | AX467063 | AX467063 Sequence    |
| c 862 | 10.2 | 51.0 | 21 | 6 | AR147417   | AR147417 Sequence   | c 935 | 10.2 | 51.0 | 29 | 6  | E27656   | E27656 Recombinant   |
| c 863 | 10.2 | 51.0 | 21 | 6 | AR209931   | AR209931 Sequence   | c 936 | 10.2 | 51.0 | 30 | 6  | AR035116 | AR035116 Sequence    |
| c 864 | 10.2 | 51.0 | 21 | 6 | AX026521   | AX026521 Sequence   | c 937 | 10.2 | 51.0 | 30 | 6  | AR084895 | AR084895 Sequence    |
| c 865 | 10.2 | 51.0 | 21 | 6 | AX096736   | AX096736 Sequence   | c 938 | 10.2 | 51.0 | 40 | 6  | AR094105 | AR094105 Sequence    |
| c 866 | 10.2 | 51.0 | 21 | 6 | AX119910   | AX119910 Sequence   | c 939 | 10.2 | 51.0 | 40 | 6  | AR117872 | AR117872 Sequence    |
| c 867 | 10.2 | 51.0 | 21 | 6 | AX119911   | AX119911 Sequence   | c 940 | 10.2 | 51.0 | 40 | 6  | AR157943 | AR157943 Sequence    |
| c 868 | 10.2 | 51.0 | 21 | 6 | AX147896   | AX147896 Sequence   | c 941 | 10.2 | 51.0 | 40 | 6  | AR173985 | AR173985 Sequence    |

|       |      |      |    |    |           |                    |
|-------|------|------|----|----|-----------|--------------------|
| c 942 | 10.2 | 51.0 | 40 | 6  | AR177841  | AK177841 Sequence  |
| c 943 | 10.2 | 51.0 | 30 | 6  | AX043040  | AX043040 Sequence  |
| c 944 | 10.2 | 51.0 | 30 | 6  | AX464426  | AX464426 Sequence  |
| c 945 | 10.2 | 51.0 | 30 | 6  | H0005771  | H0005771 Therapeut |
| c 946 | 10.2 | 51.0 | 30 | 6  | E08898    | E08898 Primer cpl  |
| c 947 | 10.2 | 51.0 | 40 | 6  | E10063    | E10063 Synthetic b |
| c 948 | 10.2 | 51.0 | 40 | 6  | W2623     | W2623 Sequence 33  |
| c 949 | 10.2 | 51.0 | 41 | 6  | AR045251  | AR045251 Sequence  |
| c 950 | 10.2 | 51.0 | 41 | 6  | AK171753  | AK171753 Sequence  |
| c 951 | 10.2 | 51.0 | 41 | 6  | AK114912  | AK114912 Sequence  |
| c 952 | 10.2 | 51.0 | 41 | 6  | AX249233  | AX249233 Sequence  |
| c 953 | 10.2 | 51.0 | 41 | 6  | H0002583  | H0002583 Gene comp |
| c 954 | 10.2 | 51.0 | 41 | 6  | W2403     | W2403 Sequence 44  |
| c 955 | 10.2 | 51.0 | 42 | 6  | A56309    | A56309 Sequence 5  |
| c 956 | 10.2 | 51.0 | 42 | 6  | AK139096  | AK139096 Sequence  |
| c 957 | 10.2 | 51.0 | 32 | 6  | AK374886  | AK374886 Sequence  |
| c 958 | 10.2 | 51.0 | 32 | 6  | A59440    | A59440 Sequence 12 |
| c 959 | 10.2 | 51.0 | 33 | 6  | A59441    | A59441 Sequence 13 |
| c 960 | 10.2 | 51.0 | 33 | 6  | AR011809  | AR011809 Sequence  |
| c 961 | 10.2 | 51.0 | 33 | 6  | AR051087  | AR051087 Sequence  |
| c 962 | 10.2 | 51.0 | 33 | 6  | AK129027  | AK129027 Sequence  |
| c 963 | 10.2 | 51.0 | 33 | 6  | AX045721  | AX045721 Sequence  |
| c 964 | 10.2 | 51.0 | 33 | 6  | AX211683  | AX211683 Sequence  |
| c 965 | 10.2 | 51.0 | 33 | 6  | AX418515  | AX418515 Sequence  |
| c 966 | 10.2 | 51.0 | 33 | 6  | AX418596  | AX418596 Sequence  |
| c 967 | 10.2 | 51.0 | 33 | 6  | W19354    | W19354 Sequence 3  |
| c 968 | 10.2 | 51.0 | 33 | 6  | W71132    | W71132 Sequence 4  |
| c 969 | 10.2 | 51.0 | 33 | 6  | W19499    | W19499 Sequence 33 |
| c 970 | 10.2 | 51.0 | 34 | 6  | AX128307  | AX128307 Sequence  |
| c 971 | 10.2 | 51.0 | 35 | 6  | AR161464  | AR161464 Sequence  |
| c 972 | 10.2 | 51.0 | 35 | 6  | AX353675  | AX353675 Sequence  |
| c 973 | 10.2 | 51.0 | 35 | 6  | AX353678  | AX353678 Sequence  |
| c 974 | 10.2 | 51.0 | 35 | 6  | W2423     | W2423 Sequence 75  |
| c 975 | 10.2 | 51.0 | 35 | 11 | C75912    | C75912 Homo sapien |
| c 976 | 10.2 | 51.0 | 36 | 1  | FC088G05  | K01111 E.coli 238  |
| c 977 | 10.2 | 51.0 | 38 | 6  | A10482    | A10482 oligonucleo |
| c 978 | 10.2 | 51.0 | 38 | 6  | A13640    | A13640 oligonucleo |
| c 979 | 10.2 | 51.0 | 38 | 6  | AX043848  | AX043848 Sequence  |
| c 980 | 10.2 | 51.0 | 38 | 6  | AX360844  | AX360844 Sequence  |
| c 981 | 10.2 | 51.0 | 38 | 6  | AX428212  | AX428212 Sequence  |
| c 982 | 10.2 | 51.0 | 38 | 6  | H0010824  | H0010824 Novel pol |
| c 983 | 10.2 | 51.0 | 38 | 6  | W2518     | W2518 Sequence 10  |
| c 984 | 10.2 | 51.0 | 39 | 6  | HSC085704 | Z50817 H.sapiens m |
| c 985 | 10.2 | 51.0 | 40 | 6  | AR029520  | AR029520 Sequence  |
| c 986 | 10.2 | 51.0 | 40 | 6  | AR053616  | AR053616 Sequence  |
| c 987 | 10.2 | 51.0 | 40 | 6  | AR055062  | AR055062 Sequence  |
| c 988 | 10.2 | 51.0 | 40 | 6  | AR098473  | AR098473 Sequence  |
| c 989 | 10.2 | 51.0 | 40 | 6  | AR135241  | AR135241 Sequence  |
| c 990 | 10.2 | 51.0 | 40 | 6  | AR146727  | AR146727 Sequence  |
| c 991 | 10.2 | 51.0 | 40 | 6  | AR152298  | AR152298 Sequence  |
| c 992 | 10.2 | 51.0 | 40 | 6  | AR156311  | AR156311 Sequence  |
| c 993 | 10.2 | 51.0 | 40 | 6  | AR157836  | AR157836 Sequence  |
| c 994 | 10.2 | 51.0 | 40 | 6  | AX441399  | AX441399 Sequence  |
| c 995 | 10.2 | 51.0 | 40 | 6  | AX453895  | AX453895 Sequence  |
| c 996 | 10.2 | 51.0 | 40 | 6  | AX456421  | AX456421 Sequence  |
| c 997 | 10.2 | 51.0 | 40 | 6  | W14143    | W14143 Sequence 40 |
| c 998 | 10.2 | 51.0 | 41 | 6  | AR083751  | AR083751 Sequence  |
| c 999 | 10.2 | 51.0 | 41 | 6  | AR109122  | AR109122 Sequence  |
| 1000  | 10.2 | 51.0 | 41 | 6  | AR200777  | AR200777 Sequence  |

## ALIGNMENTS

|            |          |          |          |                         |                         |       |        |                 |                 |                       |       |                     |      |            |   |        |   |      |   |
|------------|----------|----------|----------|-------------------------|-------------------------|-------|--------|-----------------|-----------------|-----------------------|-------|---------------------|------|------------|---|--------|---|------|---|
| RESULT 1   | 106215   | 106215   | Sequence | 1                       | From patent EP 0293785. | 46 bp | DNA    | linear          | PAT 02 DEB 1994 |                       |       |                     |      |            |   |        |   |      |   |
| LOCUS      | 106215   | Sequence | 1        | From patent EP 0293785. | 46 bp                   | DNA   | linear | PAT 02 DEB 1994 |                 |                       |       |                     |      |            |   |        |   |      |   |
| DEFINITION | 106215   | Sequence | 1        | From patent EP 0293785. | 46 bp                   | DNA   | linear | PAT 02 DEB 1994 |                 |                       |       |                     |      |            |   |        |   |      |   |
| ACCESSION  | 106215   | Sequence | 1        | From patent EP 0293785. | 46 bp                   | DNA   | linear | PAT 02 DEB 1994 |                 |                       |       |                     |      |            |   |        |   |      |   |
| VERSION    | 106215.1 | Sequence | 1        | From patent EP 0293785. | 46 bp                   | DNA   | linear | PAT 02 DEB 1994 |                 |                       |       |                     |      |            |   |        |   |      |   |
| KEYWORDS   | 106215.1 | Sequence | 1        | From patent EP 0293785. | 46 bp                   | DNA   | linear | PAT 02 DEB 1994 |                 |                       |       |                     |      |            |   |        |   |      |   |
| SOURCE     | 106215.1 | Sequence | 1        | From patent EP 0293785. | 46 bp                   | DNA   | linear | PAT 02 DEB 1994 |                 |                       |       |                     |      |            |   |        |   |      |   |
| ORGANISM   | 106215.1 | Sequence | 1        | From patent EP 0293785. | 46 bp                   | DNA   | linear | PAT 02 DEB 1994 |                 |                       |       |                     |      |            |   |        |   |      |   |
|            |          |          |          |                         |                         |       |        |                 |                 | BASE COUNT            | 10 A  | 8 C                 | 14 G | 12 T       |   |        |   |      |   |
|            |          |          |          |                         |                         |       |        |                 |                 | ORIGIN                |       |                     |      |            |   |        |   |      |   |
|            |          |          |          |                         |                         |       |        |                 |                 | Query Match           | 92.0% | Score 18.4          | DB 6 | Length 44  |   |        |   |      |   |
|            |          |          |          |                         |                         |       |        |                 |                 | Best Local Similarity | 95.0% | Prod. No. 74        |      |            |   |        |   |      |   |
|            |          |          |          |                         |                         |       |        |                 |                 | Matches               | 19    | Conserved           | 0    | Mismatches | 1 | Indels | 0 | Gaps | 0 |
|            |          |          |          |                         |                         |       |        |                 |                 | QY                    | 1     | GCACGAGTCTCTCTCTCTG | 20   |            |   |        |   |      |   |
|            |          |          |          |                         |                         |       |        |                 |                 |                       | 1     | 111111111111111111  | 111  |            |   |        |   |      |   |
|            |          |          |          |                         |                         |       |        |                 |                 | DB                    | 3     | GCACGAGTCTCTCTCTG   | 22   |            |   |        |   |      |   |

|                       |  |                        |                                 |
|-----------------------|--|------------------------|---------------------------------|
| REFERENCE             | 1  | (bases 1 to 46)        | Unclassified.                   |
| AUTHORS               | Partridge, A.F., Gentry, L., and Twardzik, D.                      |                        |                                 |
| TITLE                 | Cloning and expression of simian transforming growth factor beta 1 |                        |                                 |
| JOURNAL               | Patent: EP 0293785, A2, 1 07 DEB 1998;                             |                        |                                 |
| FEATURES              | Location/Qualifiers  |                        |                                 |
| SOURCE                | 1..46  |                        |                                 |
| BASE COUNT            | 9 a 10 c 9 q   |                        |                                 |
| ORIGIN                | 10 c 8 t   |                        |                                 |
| Query Match           | 100.0%   | Score 20;              | DB 6; Length 46;                |
| Best Local Similarity | 100.0%   | Pred. No. 9, 9;        |                                 |
| Matches               | 20;  | Conservative 0;        | Mismatches 0; Indels 0; Gaps 0; |
| QY                    | 1  | GGAGAGCTTCTTCCTGCGG 20 |                                 |
| DB                    | 4  | GGAGAGCTTCTTCCTGCGG 24 |                                 |
| RESULT 2              | 108267   | Sequence 1             | From Patent EP 0373994.         |
| LOCUS                 | 108267   | Sequence 1             | From Patent EP 0373994.         |
| DEFINITION            | 108267   | Sequence 1             | From Patent EP 0373994.         |
| ACCESSION             | 108267   | Sequence 1             | From Patent EP 0373994.         |
| VERSION               | 108267.1   | Sequence 1             | From Patent EP 0373994.         |
| KEYWORDS              | 108267.1   | Sequence 1             | From Patent EP 0373994.         |
| SOURCE                | 108267.1   | Sequence 1             | From Patent EP 0373994.         |
| ORGANISM              | 108267.1   | Sequence 1             | From Patent EP 0373994.         |
| REFERENCE             | 1  | (bases 1 to 46)        | Unclassified.                   |
| AUTHORS               | Partridge, A.F., Gentry, L., Twardzik, D., and Brummer, A.M.       |                        |                                 |
| TITLE                 | Cloning and expression of simian transforming growth factor beta 1 |                        |                                 |
| JOURNAL               | Patent: EP 0373994, A1, 1 20 JUN 1990;                             |                        |                                 |
| FEATURES              | Location/Qualifiers  |                        |                                 |
| SOURCE                | 1..46  |                        |                                 |
| BASE COUNT            | 9 a 10 c 9 q   |                        |                                 |
| ORIGIN                | 10 c 8 t   |                        |                                 |
| Query Match           | 100.0%   | Score 20;              | DB 6; Length 46;                |
| Best Local Similarity | 100.0%   | Pred. No. 9, 9;        |                                 |
| Matches               | 20;  | Conservative 0;        | Mismatches 0; Indels 0; Gaps 0; |
| QY                    | 1  | GGAGAGCTTCTTCCTGCGG 20 |                                 |
| DB                    | 4  | GGAGAGCTTCTTCCTGCGG 24 |                                 |
| RESULT 3              | A06666   | Sequence 1             | From Patent EP 0373994.         |
| LOCUS                 | A06666   | Sequence 1             | From Patent EP 0373994.         |
| DEFINITION            | A06666   | Sequence 1             | From Patent EP 0373994.         |
| ACCESSION             | A06666   | Sequence 1             | From Patent EP 0373994.         |
| VERSION               | A06666.1   | Sequence 1             | From Patent EP 0373994.         |
| KEYWORDS              | A06666.1   | Sequence 1             | From Patent EP 0373994.         |
| SOURCE                | A06666.1   | Sequence 1             | From Patent EP 0373994.         |
| ORGANISM              | A06666.1   | Sequence 1             | From Patent EP 0373994.         |
| FEATURES              | A06666.1   | Sequence 1             | From Patent EP 0373994.         |
| SOURCE                | A06666.1   | Sequence 1             | From Patent EP 0373994.         |
| BASE COUNT            | 10 a 8 c 14 q  |                        |                                 |
| ORIGIN                | 10 a 8 c 14 q  |                        |                                 |
| Query Match           | 92.0%  | Score 18, 4;           | DB 6; Length 44;                |
| Best Local Similarity | 95.0%  | Pred. No. 7, 4;        |                                 |
| Matches               | 19;  | Conservative 0;        | Mismatches 1; Indels 0; Gaps 0; |
| QY                    | 1  | GGAGAGCTTCTTCCTGCGG 20 |                                 |
| DB                    | 3  | GGAGAGCTTCTTCCTGCGG 22 |                                 |

```

RESULT 4
LOCUS AX018547.1
DEFINITION Sequence 41 from Patent W09945127.
ACCESSION AX018547
VERSION AX018547.1 GI:10042688
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
SOURCE
1. 39
/organism "synthetic construct"
/db_xref "taxon:32630"
/note "primer"
BASE COUNT 13 a 6 c 16 q 4 t
ORIGIN
Query Match 79.0%; Score 15.8; Db 6; Length 39;
Best Local Similarity 89.5%; Pred. No. 2000;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGTCTCTCTCTCTG 19
|||||
Db 49 GAGAGTCTCTCTCTCTG 21

RESULT 5
LOCUS AX018623
DEFINITION Sequence 41 from Patent W09945126.
ACCESSION AX018623
VERSION AX018623.1 GI:10042751
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
SOURCE
1. 39
/organism "synthetic construct"
/db_xref "taxon:32630"
/note "primer"
BASE COUNT 13 a 6 c 16 q 4 t
ORIGIN
Query Match 79.0%; Score 15.8; Db 6; Length 39;
Best Local Similarity 89.5%; Pred. No. 2000;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGTCTCTCTCTCTG 19
|||||
Db 49 GAGAGTCTCTCTCTCTG 21

RESULT 6
LOCUS AX018623
DEFINITION Sequence 41 from Patent W09945126.
ACCESSION AX018623
VERSION AX018623.1 GI:10042751
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
SOURCE
1. 39
/organism "synthetic construct"
/db_xref "taxon:32630"
/note "primer"
BASE COUNT 13 a 6 c 16 q 4 t
ORIGIN
Query Match 79.0%; Score 15.8; Db 6; Length 39;
Best Local Similarity 89.5%; Pred. No. 2000;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGTCTCTCTCTCTG 19
|||||
Db 49 GAGAGTCTCTCTCTCTG 21

RESULT 7
LOCUS AX018623
DEFINITION Sequence 41 from Patent W09945126.
ACCESSION AX018623
VERSION AX018623.1 GI:10042751
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
SOURCE
1. 39
/organism "synthetic construct"
/db_xref "taxon:32630"
/note "primer"
BASE COUNT 13 a 6 c 16 q 4 t
ORIGIN
Query Match 79.0%; Score 15.8; Db 6; Length 39;
Best Local Similarity 89.5%; Pred. No. 2000;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GAGAGTCTCTCTCTCTG 19
|||||
Db 49 GAGAGTCTCTCTCTCTG 21

RESULT 8
LOCUS AX018654
DEFINITION Sequence 40 from Patent W09945127.
ACCESSION AX018654
VERSION AX018654.1 GI:10042687
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
SOURCE
1. 43
/organism "synthetic construct"
/db_xref "taxon:32630"
/note "primer"
BASE COUNT 14 a 7 c 18 q 4 t
ORIGIN
Query Match 79.0%; Score 15.8; Db 6; Length 43;
Best Local Similarity 89.5%; Pred. No. 2000;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GCAGAGTCTCTCTCTG 19
|||||
Db 42 GCAGAGTCTCTCTCTG 24

RESULT 9
LOCUS AX018654
DEFINITION Sequence 40 from Patent W09945127.
ACCESSION AX018654
VERSION AX018654.1 GI:10042687
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
SOURCE
1. 43
/organism "synthetic construct"
/db_xref "taxon:32630"
/note "primer"
BASE COUNT 14 a 7 c 18 q 4 t
ORIGIN
Query Match 79.0%; Score 15.8; Db 6; Length 43;
Best Local Similarity 89.5%; Pred. No. 2000;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GCAGAGTCTCTCTCTG 19
|||||
Db 42 GCAGAGTCTCTCTCTG 24

```

```

ORGANISM      Synthetic construct
REFERENCE      artificial sequences.
AUTHORS        Kingsman, S.M., Mitrophanous, K., Patterson, A.V., Stratford, J., Le.,
               Griffiths, L. and Kan, Y.
TITLE          Enhanced product activation
JOURNAL        PATENT: WO 9945127-A 40 10 SEP 1999;
               KINGSMAN SUSAN MARY (GB); MITROPHANOUS KYRIAKOS (GB); PATTERSON
               ALAN VORN (GB); STRATFORD IAN JAMES (GB); GRIFFITHS LEIGH (GB); KAN
               ON (GB); OXFORD BIOMEDICA LTD (GB)
FEATURES       Location/Qualifiers
               source
               1..46
               /organism "synthetic construct"
               /db_xref "taxon:32630"
               /note "primer"
BASE COUNT    4 a 19 c 9 g 14 t
ORIGIN
Query Match   79.0%; Score 15.8; DB 6; Length 46;
Best Local Similarity 89.5%; Pred. No. 2003;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GACAGATTTCTTCGCG 19
|||||
Db 11 GACAGATTTCTTCGCG 29

RESULT 9
AX018622
LOCUS         AX018622             46 bp      DNA      Linear      PAT 07-SEP-2000
DEFINITION   Sequence 40 from Patent WO9945126.
ACCESSION    AX018622
VERSION      AX018622.1 GI:10042750
KEYWORDS     Synthetic construct.
SOURCE       Synthetic construct.
ORGANISM     Synthetic construct.
REFERENCE    1 (bases 1 to 46)
AUTHORS      Kingsman, S.M., Mitrophanous, K., Patterson, A.V., Stratford, J., Le.,
               Griffiths, L. and Kan, Y.
TITLE        Enhanced product activation
JOURNAL      PATENT: WO 9945126-A 40 10 SEP 1999;
               KINGSMAN SUSAN MARY (GB); MITROPHANOUS KYRIAKOS (GB); PATTERSON
               ALAN VORN (GB); STRATFORD IAN JAMES (GB); GRIFFITHS LEIGH (GB); KAN
               ON (GB); OXFORD BIOMEDICA LTD (GB)
FEATURES     Location/Qualifiers
               1..46
               /organism "synthetic construct"
               /db_xref "taxon:32630"
               /note "primer"
BASE COUNT    4 a 19 c 9 g 14 t
ORIGIN

Query Match   79.0%; Score 15.8; DB 6; Length 46;
Best Local Similarity 89.5%; Pred. No. 2003;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GACAGATTTCTTCGCG 19
|||||
Db 11 GACAGATTTCTTCGCG 29

RESULT 10
AK162485
LOCUS         AK162485             20 bp      DNA      Linear      PAT 17-OCT-2001
DEFINITION   Sequence 165 from patent US 6,258,600.
ACCESSION    AK162485
VERSION      AK162485.1 GI:16229689
KEYWORDS     Unknown.
SOURCE       Unknown.
ORGANISM     Unknown.
REFERENCE    1 (bases 1 to 20)

```

---

```

AUTHORS        Zhang, H., and Cowsett, L.M.
TITLE          Antisense modulation of caspase 8 expression
JOURNAL        PATENT: US 6,966,000 A 105 10 JUL 2003;
FEATURES       Location/Qualifiers
               1..20
               /organism "unknown"
               5 a 6 c 4 g 5 t
BASE COUNT
ORIGIN

Query Match   69.0%; Score 14.8; DB 6; Length 20;
Best Local Similarity 88.2%; Pred. No. 2,40004;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GAGATTTCTTCGCG 20
|||||
Db 4 GAGATTTCTTCGCG 20

RESULT 11
AB098676
LOCUS         AB098676             21 bp      DNA      Linear      PAT 21 JAN 2000
DEFINITION   Sequence 7 from Patent WO9846788.
ACCESSION    AB098676
VERSION      AB098676.1 GI:6734126
KEYWORDS     Identical.
SOURCE       Identical.
ORGANISM     Unclassified.
REFERENCE    1 (bases 1 to 21)
AUTHORS      Kuter, P., and Zipefuss, A.
TITLE        NOVEL PRIMERS AND METHODS FOR THE DETECTION OF DISSEMINATED TUBERC
               CELLS
JOURNAL      PATENT: WO 9846788 A 7 22 OCT 1998;
               KUTER PETER (DE); MICROMET GMBH (DE)
FEATURES     Location/Qualifiers
               1..21
               /organism "identical"
               /db_xref "taxon:32644"
               7 a 6 c 5 g 4 t
BASE COUNT
ORIGIN

Query Match   69.0%; Score 14.8; DB 6; Length 21;
Best Local Similarity 88.2%; Pred. No. 2,40004;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GAGATTTCTTCGCG 20
|||||
Db 19 GAGATTTCTTCGCG 41

RESULT 12
AB098676
LOCUS         AB098676             21 bp      DNA      Linear      PAT 21 JAN 2000
DEFINITION   Sequence 17 from Patent WO9846788.
ACCESSION    AB098676
VERSION      AB098676.1 GI:6734146
KEYWORDS     Identical.
SOURCE       Identical.
ORGANISM     Unclassified.
REFERENCE    1 (bases 1 to 21)
AUTHORS      Kuter, P., and Zipefuss, A.
TITLE        NOVEL PRIMERS AND METHODS FOR THE DETECTION OF DISSEMINATED TUBERC
               CELLS
JOURNAL      PATENT: WO 9846788 A 7 22 OCT 1998;
               KUTER PETER (DE); MICROMET GMBH (DE)
FEATURES     Location/Qualifiers
               1..21
               /organism "identical"
               /db_xref "taxon:32644"
               7 a 6 c 5 g 4 t
BASE COUNT
ORIGIN

```



Query Match 69.0%; Score 13.8; DB 6; Length 21;  
 Best Local Similarity 88.2%; Pred. No. 2.4e+04;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCGTGG 20  
 DB 19 GAGAGTCTCTCGTGG 4

RESULT 15  
 AX 91225/c AX 91225/c 21 bp DNA PAT 24-MAR-2002  
 DEFINITION Sequence 71 from Patent EP1184460.  
 ACCESSION AX 91225  
 VERSION AX 91225.1 GI:19699899  
 KEYWORDS  
 SOURCE synthetic construct.  
 ORGANISM synthetic construct.  
 REFERENCE 1  
 AUTHORS van den Hombertgh, J.P., van der Laan, J.M., Menke, H.H. and Daran, J.M.  
 TITLE Modified fungal xylanases  
 JOURNAL Patent: EP 1184460-A 71 06-MAR-2002;  
 FEATURES Location/Qualifiers  
 source  
 1..21  
 /organism "synthetic construct"  
 /db\_xref "taxon:82630"  
 /note "Primer"

BASE COUNT 6 a 4 c 7 q 4 t  
 ORIGIN  
 Query Match 67.0%; Score 13.4; DB 6; Length 21;  
 Best Local Similarity 93.8%; Pred. No. 4e+04;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCGT 18  
 DB 19 GAGAGTCTCTCGT 5

RESULT 14  
 AX 99550/c AX 99550/c 21 bp DNA PAT 28 MAY-2002  
 DEFINITION Sequence 71 from Patent WO0218561.  
 ACCESSION AX 99550  
 VERSION AX 99550.1 GI:21262097  
 KEYWORDS  
 SOURCE synthetic construct.  
 ORGANISM synthetic construct.  
 REFERENCE 1  
 AUTHORS Van, D.H., van der Laan, J.M., Menke, H.H. and Daran, J.M.  
 TITLE Modified fungal xylanases  
 JOURNAL Patent: WO 0218561-A 71 07-MAR-2002;  
 FEATURES Location/Qualifiers  
 source  
 1..21  
 /organism "synthetic construct"  
 /db\_xref "taxon:82630"  
 /note "Primer"

BASE COUNT 6 a 4 c 7 q 4 t  
 ORIGIN  
 Query Match 67.0%; Score 13.4; DB 6; Length 21;  
 Best Local Similarity 93.8%; Pred. No. 4e+04;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCGT 18  
 DB 19 GAGAGTCTCTCGT 5

RESULT 15  
 AX 91222 AX 91222 43 bp DNA PAT 23 MAR 2002  
 DEFINITION Sequence 68 from Patent EP1184460.  
 ACCESSION AX 91222  
 VERSION AX 91222.1 GI:19699896  
 KEYWORDS  
 SOURCE synthetic construct.  
 ORGANISM synthetic construct.  
 REFERENCE 1  
 AUTHORS van den Hombertgh, J.P., van der Laan, J.M., Menke, H.H. and Daran, J.M.  
 TITLE Modified fungal xylanases  
 JOURNAL Patent: EP 1184460-A 68 06-MAR-2002;  
 FEATURES Location/Qualifiers  
 source  
 1..43  
 /organism "synthetic construct"  
 /db\_xref "taxon:82630"  
 /note "Primer"

BASE COUNT 6 a 11 c 8 q 6 t 2 others  
 ORIGIN  
 Query Match 67.0%; Score 13.4; DB 6; Length 43;  
 Best Local Similarity 93.8%; Pred. No. 4e+04;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCGT 18  
 DB 3 GAGAGTCTCTCGT 17

RESULT 16  
 AX 99547 AX 99547 33 bp DNA PAT 28 MAY-2002  
 DEFINITION Sequence 68 from Patent WO0218561.  
 ACCESSION AX 99547  
 VERSION AX 99547.1 GI:21262094  
 KEYWORDS  
 SOURCE synthetic construct.  
 ORGANISM synthetic construct.  
 REFERENCE 1  
 AUTHORS Van, D.H., van der Laan, J.M., Menke, H.H. and Daran, J.M.  
 TITLE Modified fungal xylanases  
 JOURNAL Patent: WO 0218561 A 68 07-MAR-2002;  
 FEATURES Location/Qualifiers  
 source  
 1..33  
 /organism "synthetic construct"  
 /db\_xref "taxon:82630"  
 /note "Primer"

BASE COUNT 6 a 11 c 8 q 6 t 2 others  
 ORIGIN  
 Query Match 67.0%; Score 13.4; DB 6; Length 33;  
 Best Local Similarity 93.8%; Pred. No. 4e+04;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 GAGAGTCTCTCGT 18  
 DB 3 GAGAGTCTCTCGT 17

RESULT 17  
 AX 91224 AX 91224 46 bp DNA PAT 23 MAR 2002  
 DEFINITION Sequence 69 from Patent EP1184460.  
 ACCESSION AX 91224  
 VERSION AX 91224.1 GI:19699897  
 KEYWORDS  
 SOURCE synthetic construct.  
 ORGANISM synthetic construct.

## artificial sequences.

REFERENCE 1  
AUTHORS van den Bambergh, J. P., van der Laan, J. M., Menke, H. H., and Baran, J. M.  
TITLE Modified fungal xylandases  
JOURNAL Patent: EP 1184460 A 69 06 MAR 2002;  
USM N.V. (NL)  
FEATURES Location/Qualifiers  
SOURCE 1..36  
/organism "Synthetic construct"  
/db\_xref "taxon:42640"  
/note "Primer"

BASE COUNT 8 a 12 c 8 g 6 t 2 others  
ORIGIN  
Query Match 67.0%; Score 13.4; DB 6; Length 36;  
Best Local Similarity 93.3%; Pred. No. 4004; 1; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 1

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

## RESULT 18

AX 99548  
LOCUS AX99548 36 bp DNA linear PAT 28 MAY 2002  
DEFINITION Sequence 69 from Patent WO0218561.  
AUTHORS Van, D. H., van der Laan, J. M., Menke, H. H., and Baran, J. M.  
TITLE Modified fungal xylandases  
JOURNAL Patent: WO 0218561 A 70 07 MAR 2002;  
USM N.V. (NL)  
FEATURES Location/Qualifiers  
SOURCE 1..36  
/organism "Synthetic construct"  
/db\_xref "taxon:42640"  
/note "Primer"

BASE COUNT 8 a 12 c 8 g 6 t 2 others  
ORIGIN  
Query Match 67.0%; Score 13.4; DB 6; Length 36;  
Best Local Similarity 93.3%; Pred. No. 4004; 1; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 1

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

## RESULT 19

AX 991224  
LOCUS AX991224 49 bp DNA linear PAT 28 MAR 2002  
DEFINITION Sequence 70 from Patent EP1184460.  
AUTHORS van den Bambergh, J. P., van der Laan, J. M., Menke, H. H., and Baran, J. M.  
TITLE Modified fungal xylandases  
JOURNAL Patent: EP 1184460 A 70 06 MAR 2002;  
USM N.V. (NL)  
FEATURES Location/Qualifiers  
SOURCE 1..39  
/organism "Synthetic construct"  
/db\_xref "taxon:42640"  
/note "Primer"

BASE COUNT 8 a 12 c 8 g 6 t 2 others  
ORIGIN  
Query Match 67.0%; Score 13.4; DB 6; Length 49;  
Best Local Similarity 93.3%; Pred. No. 4004; 1; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 1

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

## artificial sequences.

REFERENCE 1  
AUTHORS van den Bambergh, J. P., van der Laan, J. M., Menke, H. H., and Baran, J. M.  
TITLE Modified fungal xylandases  
JOURNAL Patent: EP 1184460 A 69 06 MAR 2002;  
USM N.V. (NL)  
FEATURES Location/Qualifiers  
SOURCE 1..36  
/organism "Synthetic construct"  
/db\_xref "taxon:42640"  
/note "Primer"

BASE COUNT 8 a 12 c 8 g 6 t 2 others  
ORIGIN  
Query Match 67.0%; Score 13.4; DB 6; Length 36;  
Best Local Similarity 93.3%; Pred. No. 4004; 1; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 1

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

## RESULT 20

AX 99549  
LOCUS AX99549 49 bp DNA linear PAT 28 MAY 2002  
DEFINITION Sequence 70 from Patent WO0218561.  
AUTHORS Van, D. H., van der Laan, J. M., Menke, H. H., and Baran, J. M.  
TITLE Modified fungal xylandases  
JOURNAL Patent: WO 0218561 A 70 07 MAR 2002;  
USM N.V. (NL)  
FEATURES Location/Qualifiers  
SOURCE 1..39  
/organism "Synthetic construct"  
/db\_xref "taxon:42640"  
/note "Primer"

BASE COUNT 8 a 12 c 8 g 6 t 2 others  
ORIGIN  
Query Match 67.0%; Score 13.4; DB 6; Length 49;  
Best Local Similarity 93.3%; Pred. No. 4004; 1; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 1

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

## RESULT 21

AX 91206  
LOCUS AX91206 19 bp DNA linear PAT 15 MAY 2001  
DEFINITION Sequence 2424 from Patent WO0130362.  
AUTHORS Kohnen, J. M., and Litz, J. R.  
TITLE Ribozyme therapy for the treatment of proliferative skin and eye diseases  
JOURNAL Patent: WO 0130362-A 2424 03 MAY 2001;  
USM N.V. (NL)  
FEATURES Location/Qualifiers  
SOURCE 1..19  
/organism "Homo Sapiens"  
/db\_xref "taxon:9606"  
/note "cyetlin P ribozyme binding site"

BASE COUNT 5 a 6 c 3 g 1  
ORIGIN  
Query Match 66.0%; Score 13.2; DB 6; Length 19;  
Best Local Similarity 83.3%; Pred. No. 9,1004;

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111

1b 4 GACGCTCTCTCGT 18  
1111 11111111

1b 3 GACGACCTCTCGT 17  
1111 11111111



